

# Design

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Price \$4

# Danish molecules dance an English jig



PRISM

New landmarks are appearing on Copenhagen's waterfront. Soon after Christmas a valve will be opened in a pipeline from the Maersk refinery, which supplies the city with most of its gas, and a stream of ethylene will begin the intricate journey through compressors and reaction vessels that will transform it into one of the world's most versatile plastics: polythene.

The high-pressure process that persuades the invisible molecules of an invisible gas to choose partners, link up in long chains and form a tough, resilient plastic, was discovered by I.C.I., Britain's leading chemical company; and today it

is used to make most of the one million tons of polythene produced every year throughout the world. In Britain, Australia, Canada and India, I.C.I. and its subsidiary companies operate plants making 'Alkathene' polythene for everything from squeeze-bottles and nailbrushes to packaging film and cable insulation. In seven other countries, 14 manufacturers are licensed by I.C.I. to make polythene, and to build the new polythene plant in Copenhagen, I.C.I. has joined forces with the A. P. Möller Shipping Companies. Once again, I.C.I.'s mastery of mammoth pressures and capricious temperatures will make the molecules dance.

*The influence of I.C.I. research and production  
is felt today in every corner of the globe*

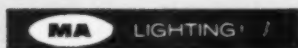
Imperial Chemical Industries Ltd., London, S.W.1





**Drum series.** A range of 25 pendant, wall and ceiling units, from 5" to 15" in diameter, available in 6 colours.

Its salient feature is the translucent opal precision moulded louvre. Designed by Paul Boissevain.



**Merchant Adventurers Limited**

Feltham, Middlesex. Telephone FEL 3686  
Full information is given in publication D6

# Relax... you have created

thirteen thoroughbred floors  
mounting in a mighty monolith  
from firm-fathomed foundations

a fabulous functional layer cake  
in which a thousand men and women  
will swish mixer taps  
slide sleek glass doors  
work plan plot  
and maybe sleep a little

With mind and pen and sheer hard graft  
you have (admit it man)  
contrived perfection

You even remembered to put in  
the lifts this time

*Now, since the lily must be painted  
arrange for it to be done with*

 **Keystone** PAINTS

they look good, last long  
and complement your own skill

*You won't know this if you are too busy to clutter your mind with apparently irrelevant facts  
but Keystone Paints are used for decoration and protection inside and out  
by imposing and important people like*





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**KEYSTONE PAINT & VARNISH COMPANY LTD., HINDLEY, LANCASHIRE - TEL: WIGAN 55251/6**

LONDON OFFICE: Keystons House, 15, Adeline Place, London, W.C.1. Telephone: Museum 2133/4. LEEDS OFFICE: Permanent House, The Headrow, Leeds, 1. Telephone: Leeds 33888

# ALLOM HEFFER

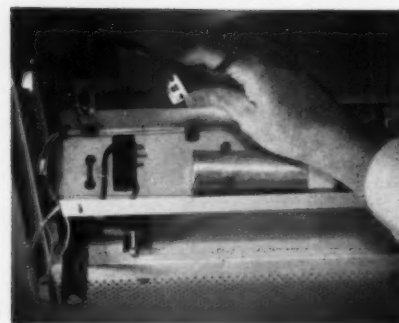
AND COMPANY LIMITED

The 707 range of Recessed Modular Fittings incorporates all the refinements necessary for quick fixing and easy maintenance.

Pictorially are shown the salient points:

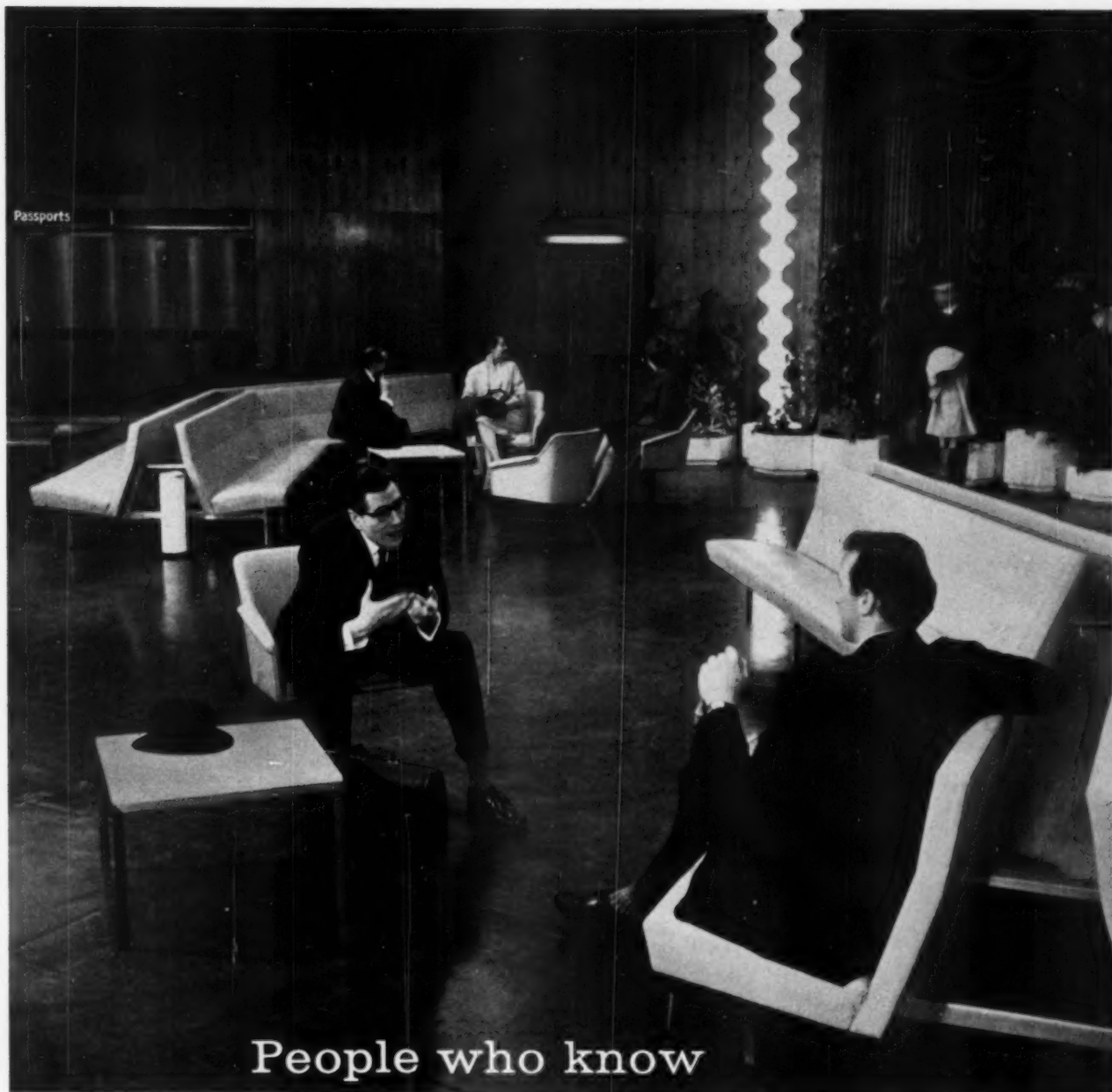
- 1 Finger tip fixing (quick fix catch Patent Application No. 39587/60).
- 2 Plug and socket connection.
- 3 Detachable and hinged gear trays.
- 4 A pull-push method of opening and shutting diffuser, which can be hinged and detached.  
(Locking device—Patent application No. 32933/59).

*Apply for leaflet Series 707*



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are talking about

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**HEAL'S**  
CONTRACTS LIMITED

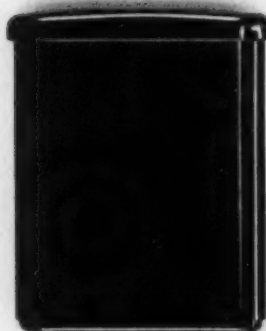
196 Tottenham Court Road London W1 Museum 1666



# FIESTA

*m e l a m i n e*

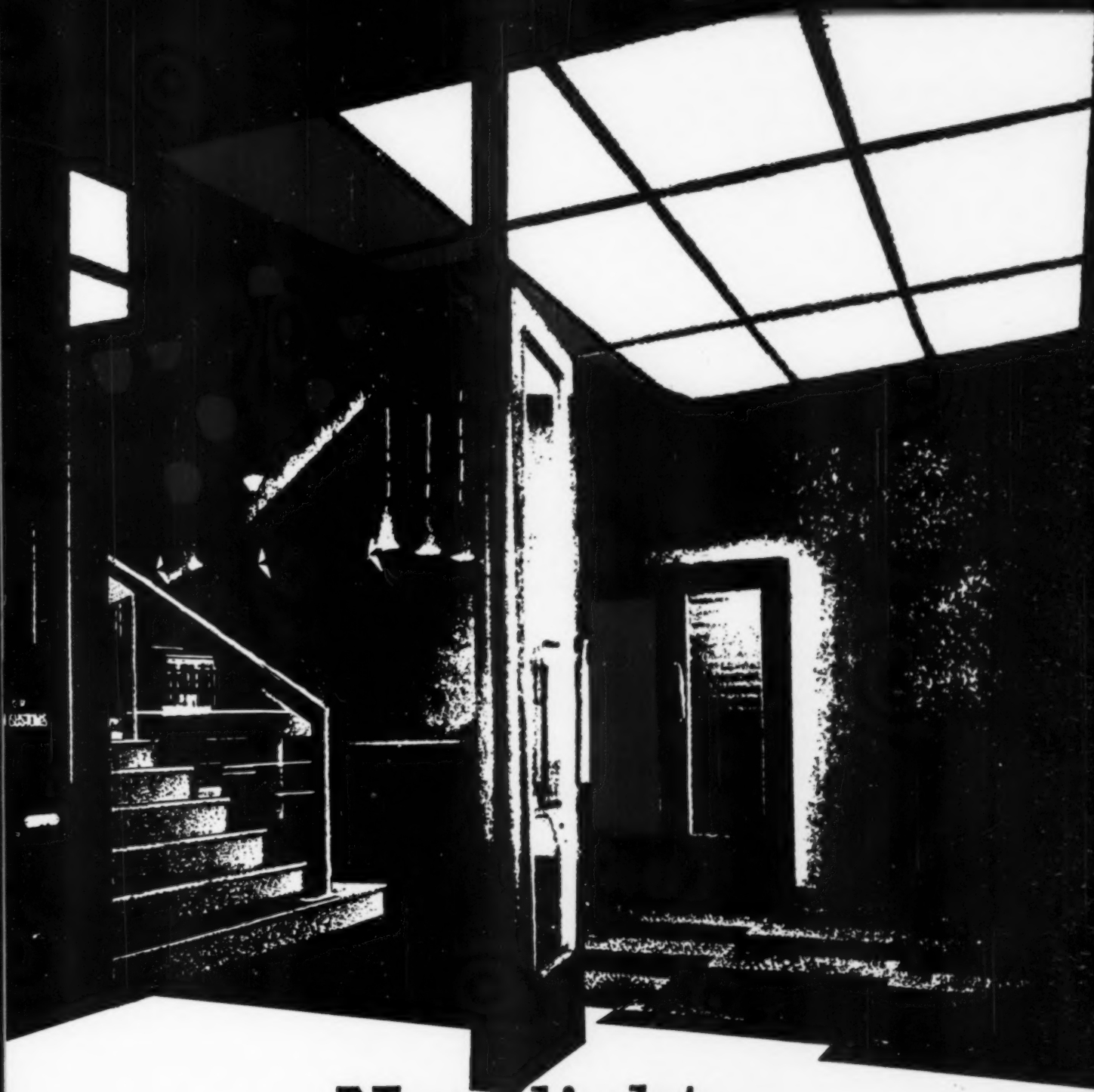
DESIGNED BY RONALD BROOKES, FSIA



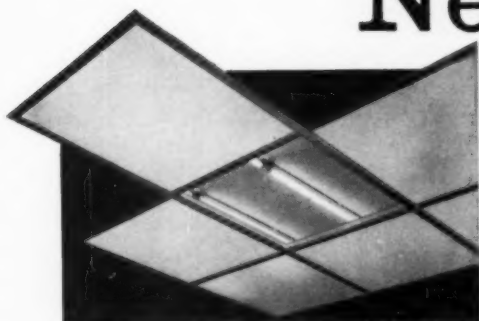
BROOKES AND ADAMS LIMITED • BIRMINGHAM







# New light on lighting



*A WESTMINSTER ceiling with one panel removed*

Lumenated Ceilings offer three systems of practical but imaginative lighting—Standard, Module, and the new low-cost Westminster ceiling. Our engineers know a great deal about every aspect of lighting and welcome opportunities of collaborating with the architect in the earliest stages of design. Please send for details of the Lumenated Ceilings range and services.





*The Sadia Two-plus Water Heater—manufactured from STELVETITE, by Aldas Electric, Sadia Works, Rowdell Road, Northolt, Middlesex.*

## STELVETITE (PLASTIC BONDED TO STEEL) can cut production time and costs

Stelvetite saves a considerable amount of money by eliminating an expensive production operation—surface finishing. And the P.V.C. surface of Stelvetite is more than just decorative. It is durable. It won't chip or deteriorate, it's weather-proof, an insulation, and heat resistant. And Stelvetite can be worked just like ordinary steel. Deep draw it, cut it, bend it, fold it, shape it and weld it. These standard production operations will not impair Stelvetite's surface.

Colours and textures are available from a very wide range, and delivery can be by the sheet or coil. Prices are competitive.

Stelvetite can be used outside (building cladding for instance) as well as inside, and its overall potentialities are enormous. Everything from decorative jewel-boxes to office partitioning, from desk tops to the Bank Travolator roof, is a subject for Stelvetite, and by using it surface finishing becomes a thing of the past.

### AMONG THE MANY WELL-KNOWN USES OF STELVETITE ARE:

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GOBLIN WASHING MACHINES • SMITH'S CLOCKS • BLEND FURNITURE • PYE CAR RADIO • SELFRIDGES' COUNTERS • PRESTCOLD  
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As an architect, as a manufacturer, as a builder, as a designer, or as an industrialist with curiosity, it would be well worth your while writing for further particulars of this remarkable material to:

**JOHN SUMMERS AND SONS LIMITED**  
DEPT. D.N. HAWARDEN BRIDGE STEEL  
WORKS • SHOTTON • CHESTER

*Made in co-operation with*  
**BX PLASTICS LIMITED**

**THINGS TO COME  
ARE HERE**



## **UNBRAKO-AD**

THE ADVANCED DESIGN DIVISION OF UNBRAKO

The planners for tomorrow need the fasteners of the future now. Happily, this essential service to posterity is safely in the hands of Unbrako's Advanced Design Division, where men of experience and vision tirelessly probe into the future, seeking the answers before the problems are posed.

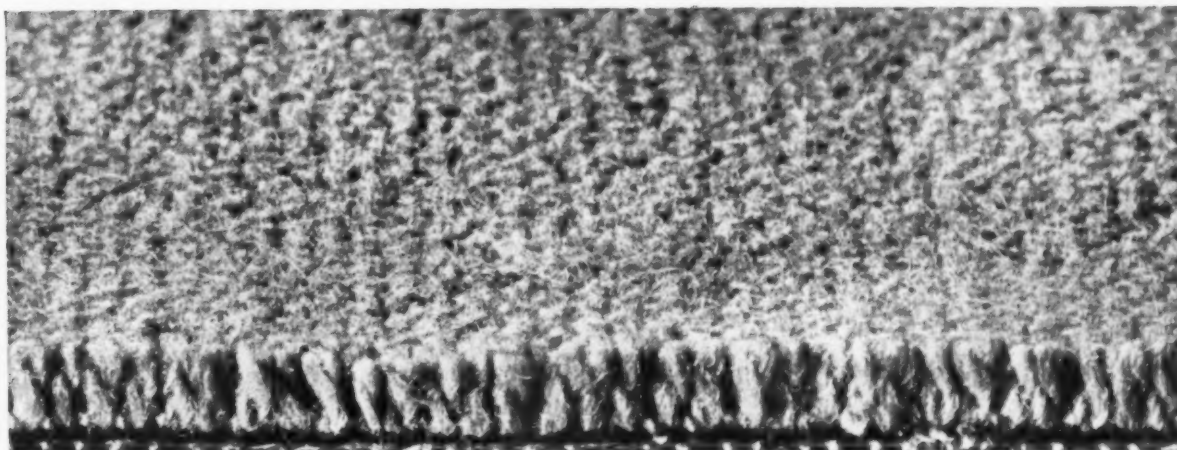
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UNBRAKO SCHRAUBEN Gm b. H. KOBLENZ - UNBRAKO STEEL CO. LTD., SHEFFIELD, ENGLAND





# 2,500,000 FEET



# WALKED OVER THIS CARPET

*and there's still years of life left*

## NOW—PERFORMANCE FIBRE FOR CARPETS

With the co-operation of the organisers of the Ideal Homes Exhibition, standard contract quality 100% Acrilan 15 pile carpet made by James Templeton & Company was laid in the main gangway of the Empire Hall, Olympia. For over a month from ten in the morning till ten at night over 1½ million people walked over this carpet subjecting it to one of the most rigorous tests ever devised.

At the end of the Exhibition, this standard Templeton carpet was taken up and cleaned by conventional methods by the Patent

Steam Carpet Beating Company. The difference between the carpet before the test and afterwards was very slight considering the amount of wear to which it was subjected. Here is powerful proof that, even under the most rigorous conditions, carpet made with Acrilan 15 fibre not only wears extremely well, but proves quick and easy to clean and closely retains its original appearance.

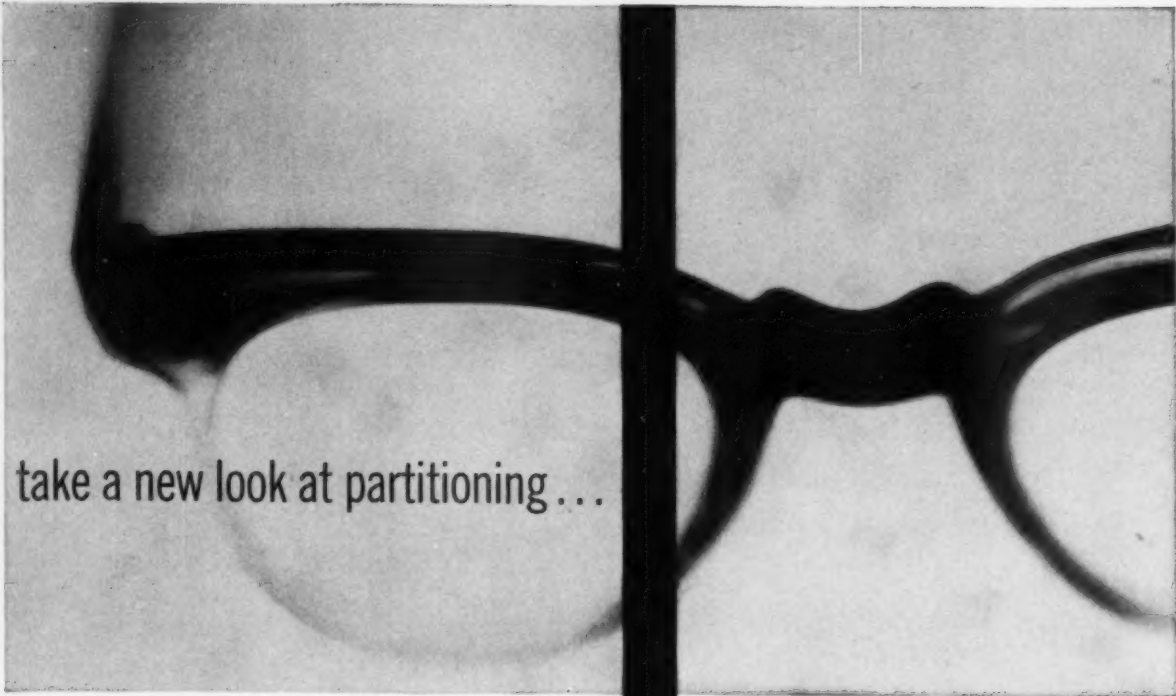
Brochures showing samples of the carpet used in this test are available from Chemstrand Ltd., 8, Waterloo Place, London, S.W.1.

ACRILAN is the registered trademark for the acrylico fibre supplied by CHEMSTRAND LIMITED. CHEMSTRAND make only the fibre—Britain's finest Carpet Manufacturers do the rest.



March 3rd, 1961. Acrilan 15 carpet in the Empire Hall ready to be walked over by 2,500,000 feet.

# ACRILAN<sub>15</sub>



take a new look at partitioning...

The Cunic system is a simple, and completely new approach to space division. This is what it brings to your office planning:

1. Complete re-arrangement is quick and easy—and never any damage to floor or ceiling—a job that can be tackled in a week-end.
2. Floor area divides exactly as you want for efficient operation.
3. Suspended ceiling can incorporate both heating and lighting systems.
4. Storage wall components provide shelves, cupboards, drawer units and enquiry hatches where they are needed.
5. Services for lighting, power and telephones are concealed in the uprights.
6. Unlimited choice of modern finishes in paint, plastic, cork, steel, glass, paper, fabric, leathercloth, wood veneer etc.



## Cunic partition system

Designed by Nicholson Bros.  
Manufactured by Holland & Hannen and Cubitts Ltd.  
For illustrated brochure write to the Distributors:—

**Milne Gibson & Ferguson Limited**  
258 Gray's Inn Road, London, WC1

Costs no more than other forms of  
comparable demountable partitioning

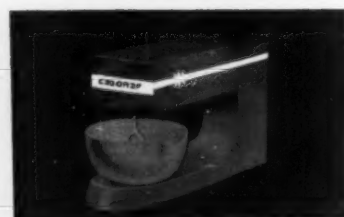
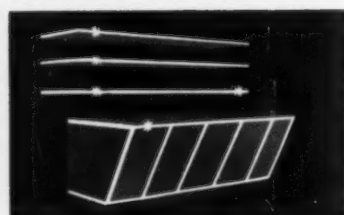
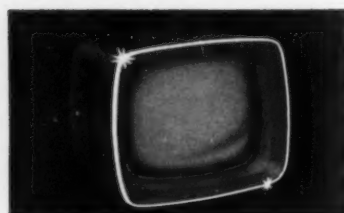


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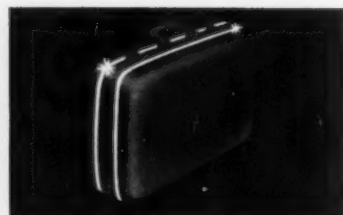
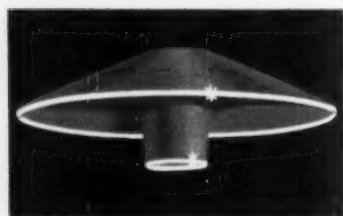
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Motor cars or television sets, shop fittings or domestic appliances, lamp shades or suitcases – “Claylastic” is used to give ‘the finishing touch’. This material manufactured in five standard finishes simulating gold, silver, copper, chrome and brass is famous for its high lustre finish, which is resistant to corrosion under the most arduous conditions. “Claylastic” has the additional quality of flexibility which facilitates simple, damage free, assembly on production lines.

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Our Technical Staff are always at your service to give advice and information right from the design stage.

“Claylastic” is protected by British Patent No. 801934.

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# AEROPREEN

## Award 1961 Winners

**1<sup>st</sup>**

A metal frame easy chair with loose cushions, 'Knock-down' construction.  
Designed by William F. Plunkett, Second Year Student at Kingston-upon-Thames School of Art. Prototype developed and made by the designer.

**2<sup>nd</sup>**

A unit chair on wooden frame with interchangeable seat and back cushions.  
Designed by Paul Goble, NDD and Dorothy Goble. Prototype developed and made by the Stag Cabinet Co. Ltd., Nottingham.

**3<sup>rd</sup>**

A fully-upholstered chaise-longue of advanced design and construction, with aluminium under-frame and main frame of preformed polystyrene.  
Designed by Geoffrey B. Callister, Fourth Year Student at the LCC Central School of Arts and Crafts, London. Prototype developed and made by the Stag Cabinet Co. Ltd., Nottingham.

*The Directors of Aeropreen congratulate the winners of the Aeropreen Award 1961 on their fine achievements, and are happy to announce that owing to the very great interest that this Award aroused there will be a further Award in 1962, when the scope will be widened.*

## Highly Commended

Fibreglass easy chair designed by Walter Fletcher and Peter Conn, City of Leeds College of Art. Upholstery by Mines and West Ltd.

Wood frame chair designed by Michael Knott, DES.RCA, NDD.

Made by Stag Cabinet Co. Ltd.

Veneered laminated plywood armchair designed by Anthony G. F. Miller, DES.RCA.

Made by D. Meredith Ltd.

Armchair designed by Norman Plastow, ARIBA, LSIA.

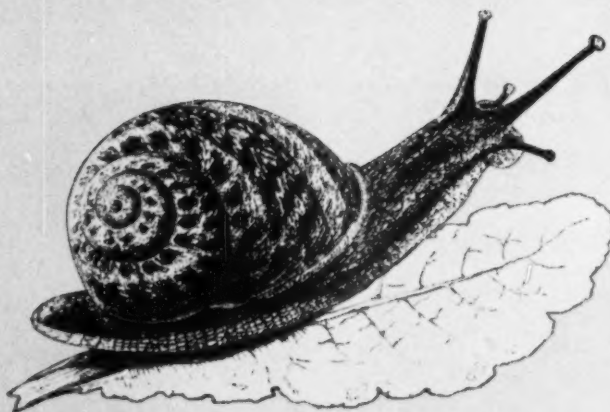
Made by D. Meredith Ltd.

A box frame chair designed by F. J. B. Rowley, NDD. Made by D. Meredith Ltd.

Convertible bed-settee designed by John B. Vayro, Newcastle-upon-Tyne

College of Art and Industrial Design. Made by Stag Cabinet Co. Ltd.

*Aeropreen Ltd. High Wycombe, Bucks*



**MADE TO MEASURE**

The snail, most thoughtfully, goes to some pains to reconcile his own needs with those of the conchologist

- As home and protection, his shell must be tough, portable, and very much made to measure. At the same time, it must have just those qualities which—in due course—will delight the collector
- Sheet steel from the City of Steel follows no less closely its intended purpose
- Each order is treated as a separate assignment so that you, the manufacturer, get the particular kind of steel your product needs
- Steel, in fact, made to measure—to your exact requirements.



**THE STEEL COMPANY OF WALES LIMITED**

## EXECUTIVE...

A new range of commercial lighting fittings, pendant and ceiling type, offering a wide choice of glasses, reflectors, skirts and suspensions, based on a quite small number of standard components. This is **EXECUTIVE** lighting, elegant, versatile and easy to maintain. Particularly suitable for offices, shops and stores, schools and public buildings.



New simple 'TURN and LOWER' action for easiest ever installation and maintenance.

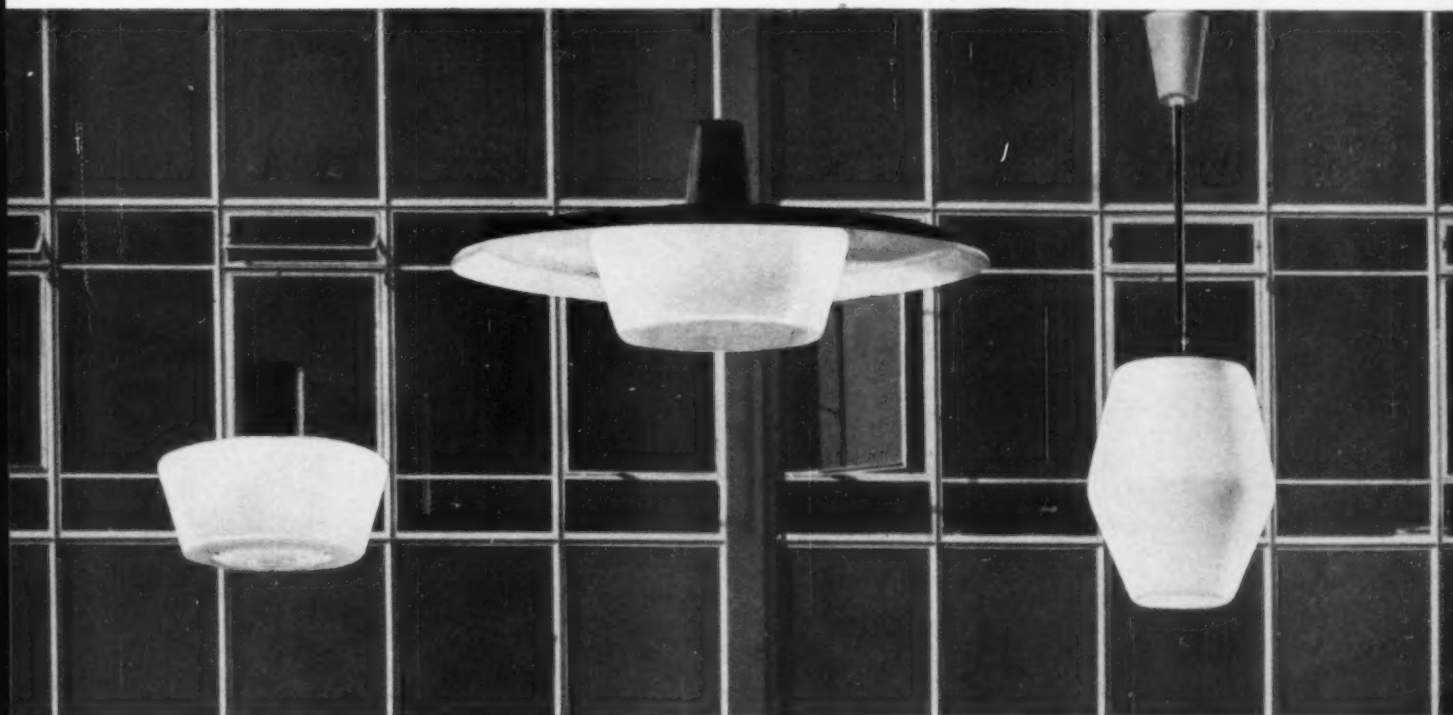
G.E.C.'s new positive bayonet fixing with 'turn and lower' action means **EXECUTIVE** glasses can be fixed or removed in an instant, saving time and money on maintenance and lamp replacement. (Patent applied for).



**EXECUTIVE** suspensions in ten different lengths are either  $\frac{1}{4}$  in. silver anodised aluminium tube or this new steel reinforced white flexible with positive and independent anchoring system top and bottom. (Patent applied for).



Internal locking screw on lampholder prevents unscrewing when relamping.



# EXECUTIVE



LIGHTING & HEATING GROUP, THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2



# METAL FURNITURE

in tapered tube!



P. 185



HB. 255



S. 186



AY. 257



UL. 258

Du-al metal furniture is styled for appearance and comfort combined with sturdy construction, finish and durability.

Du-al have the answer to all your seating problems.

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## A CLEVER NEW IDEA in fluorescent lighting



Let the picture tell the story. Only a short while beforehand, this room was just another room with ordinary lighting. Now you see it with the very latest, smartest thing in fluorescent lighting. *And there was none of that business of drilling holes in the ceiling!* It wasn't necessary. You see, the single cantilever arm fits very very snugly into the existing wiring system. Neat idea, eh? That's why Mazda call it the 'Netaline' (pronounced 'Neater Line').

COLOURS: Yellow, blue, lilac. WEIGHT: Only 3½ lbs. LENGTH: 56½".  
Space from ceiling to fitting 6". CONSUMPTION: 7 hours for 1d.

**81/-** In attractive carry-home pack  
with full 12-month guarantee

MARVELLOUS VALUE FROM ALL MAZDA DEALERS  
AND ELECTRICITY SHOWROOMS

# Mazda NETALINE

AN **AEI** PRODUCT

914010



# METAL FURNITURE

in tapered tube!



P. 185



HB. 255



S. 186



AY. 257



UL. 258

Du-al metal furniture is styled for appearance and comfort combined with sturdy construction, finish and durability.

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**81/-** *In attractive carry-home pack  
with full 12-month guarantee*

MARVELLOUS VALUE FROM ALL MAZDA DEALERS  
AND ELECTRICITY SHOWROOMS

# Mazda NETALINE

AN **AEI** PRODUCT

M4920

increased  
production  
means  
**quicker deliveries**



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REGISTERED TRADE MARK  
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More and more fabricators in Stainless Steels obtain their supplies in the form of sheet and strip. The installation of additional plant ensures good deliveries and a surface finish better than ever before. Sheet and strip in all the well-known types of "Staybrite" Stainless Steel are supplied to an ever increasing number of industries and our long-standing technical experience is always available to advise on the correct type of Stainless Steel to be used for particular service conditions.



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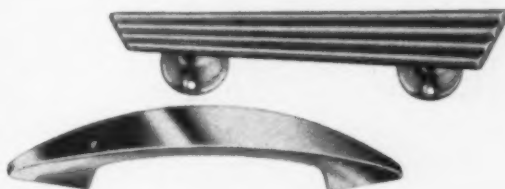
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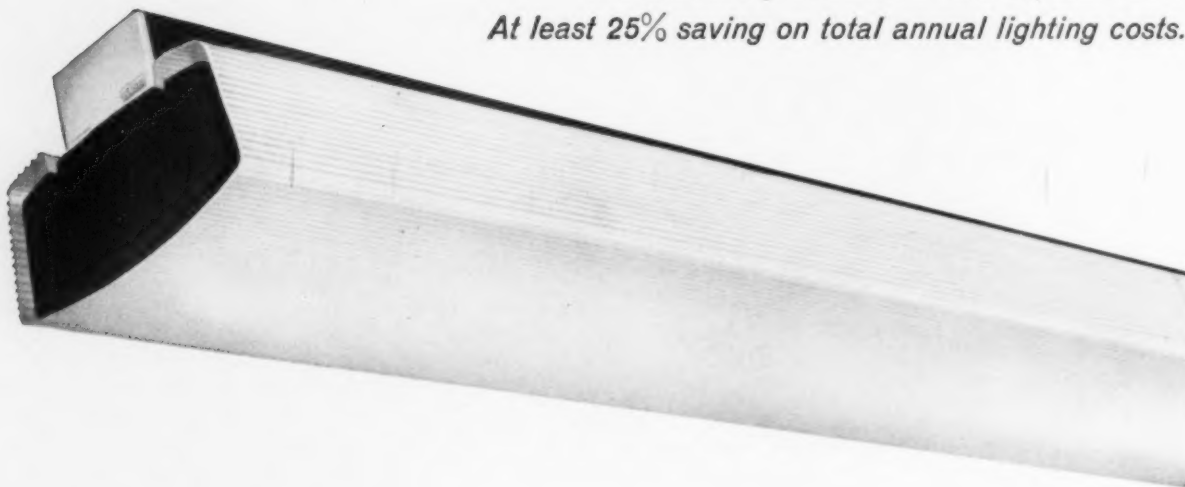


# **new atlas super-8 circuit**

## ***cuts today's fluorescent lighting costs by 25%***

This latest Atlas advance is based on their development of a new 8ft. 85w. tube (with an output of 81 lumens per watt) and new low loss control gear. They form a twin tube unit which offers substantial economies compared with a standard 5ft. 80w. twin fitting.

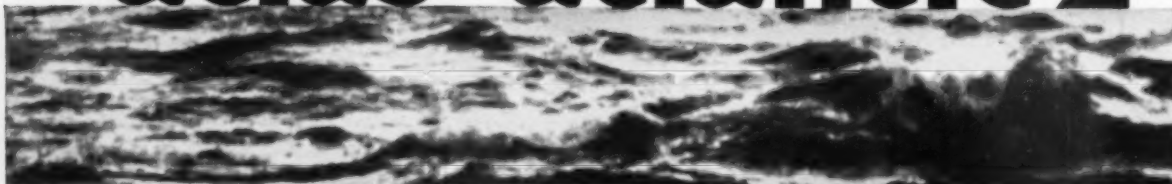
*15% saving on capital cost of lighting fittings*  
*15% saving on capital cost of installation wiring*  
*35% saving on current consumption costs.*  
***At least 25% saving on total annual lighting costs.***



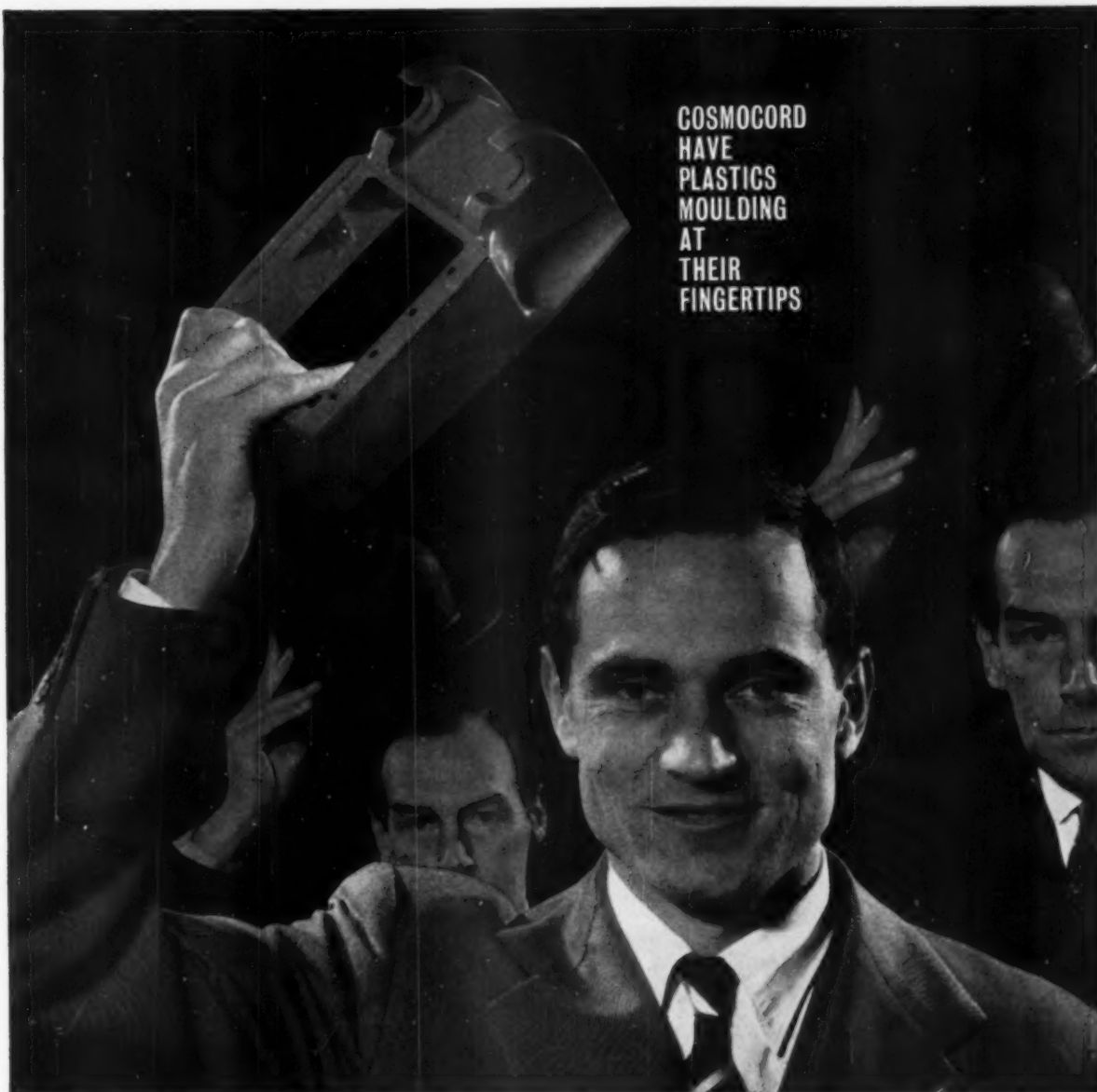
To these advantages more are added when the circuit is incorporated in the 8ft. Atlantic 2 chassis . . . rapid installation, simple maintenance, good design and finish, a complete range of diffuser and reflector attachments.

**the super-8 circuit comes to life with**

# **atlas atlantic 2**



For complete details please write to: ATLAS LIGHTING LIMITED, THORN HOUSE, UPPER ST. MARTIN'S LANE, LONDON WC2  
DTV



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HAVE  
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MOULDING  
AT  
THEIR  
FINGERTIPS

Cosmocord are experts in plastics moulding to their fingertips. Within arms reach at the modern Cosmocord factory they have powerful and up-to-date plant including *over 50 injection and compression machines*. There's skill and know-how in the palms of their hands. There are designers keen to solve problems neatly and economically, and production people who are as fussy about their products as you are about yours. Cosmocord will make your new moulds for you. Try Cosmocord and you'll raise your hat to them for speed, quality, price.



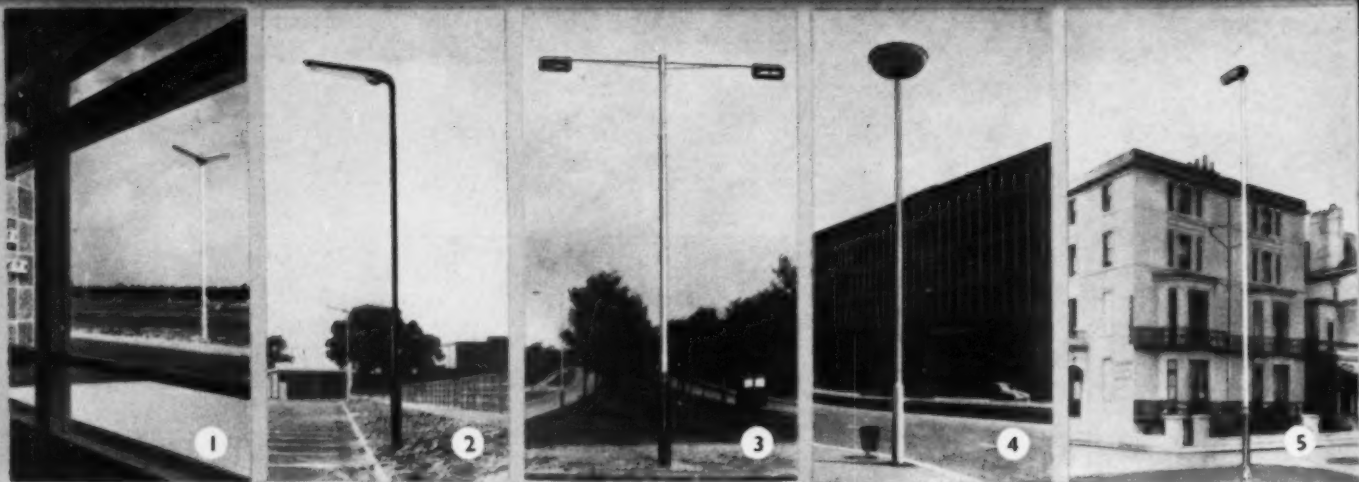
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plastics moulding at their fingertips

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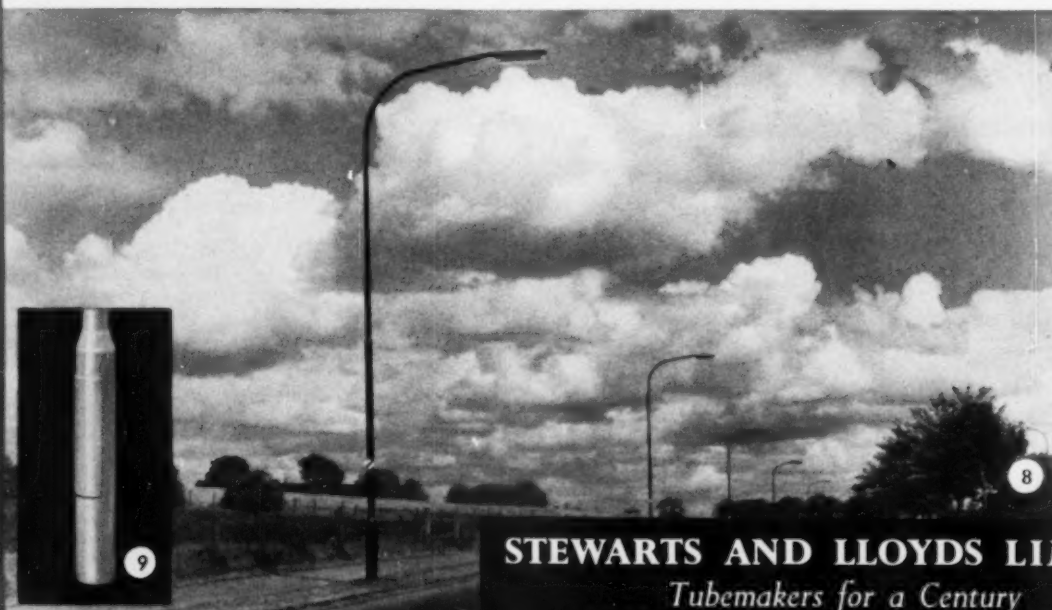
## Lighting for safety—with S & L TUBULAR STEEL LIGHTING COLUMNS

Efficient lighting is now accepted as one of the major steps towards greater road safety. City or Borough Engineers and Surveyors investigating lighting schemes are invited to call on the services of the S & L design staff whose experience helps them to achieve effective street lighting adaptable to environment and economical in maintenance and operation. Mounting heights of S & L columns (manufactured to B.S. 1840-1960) range from 13 ft. to 40 ft.; varying outreach permits offsetting from pavement edge.

A few of the many S & L lighting schemes and new designs are shown here.

1. Type Gb. 965 B, 25 ft. mounting height.
2. Type Gb. 965 A, 25 ft. mounting height. Columns shown in 1 and 2 are installed adjacent to the Borough of Shrewsbury's livestock market.
3. Type Gb. 591 double bracket arm, 25 ft. mounting height.
4. Type Gb. 1033, 30 ft. mounting height. Supplied to the Corporation of Birmingham.
5. Type LC 301, 35 ft. mounting height. Displayed at the 1960 A.P.L.E. Exhibition, Folkestone.
6. Type Gb. 825, 25 ft. mounting height. Installed at Merstham by the Reigate Corporation.
7. Type Gb. 837/1, 15 ft. mounting height. Displayed at the 1960 A.P.L.E. Exhibition, Folkestone.
8. Type Gb. 995, 35 ft. mounting height. Supplied to the Lanark County Council. (The first installation in the U.K. using this type of column.)
9. The new plain 'S & L slip-in' door supplied for all standard lighting columns.

*Our catalogue, with illustrations and section drawings, is available on request.*



**S & L**

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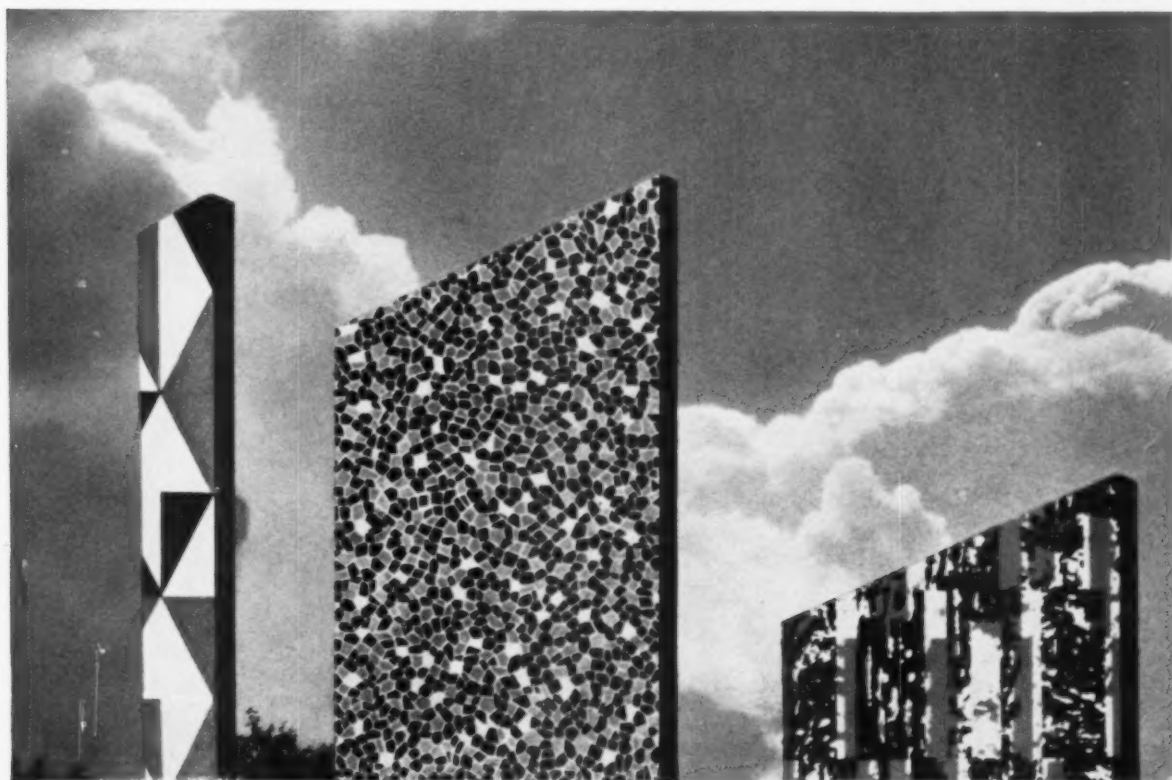
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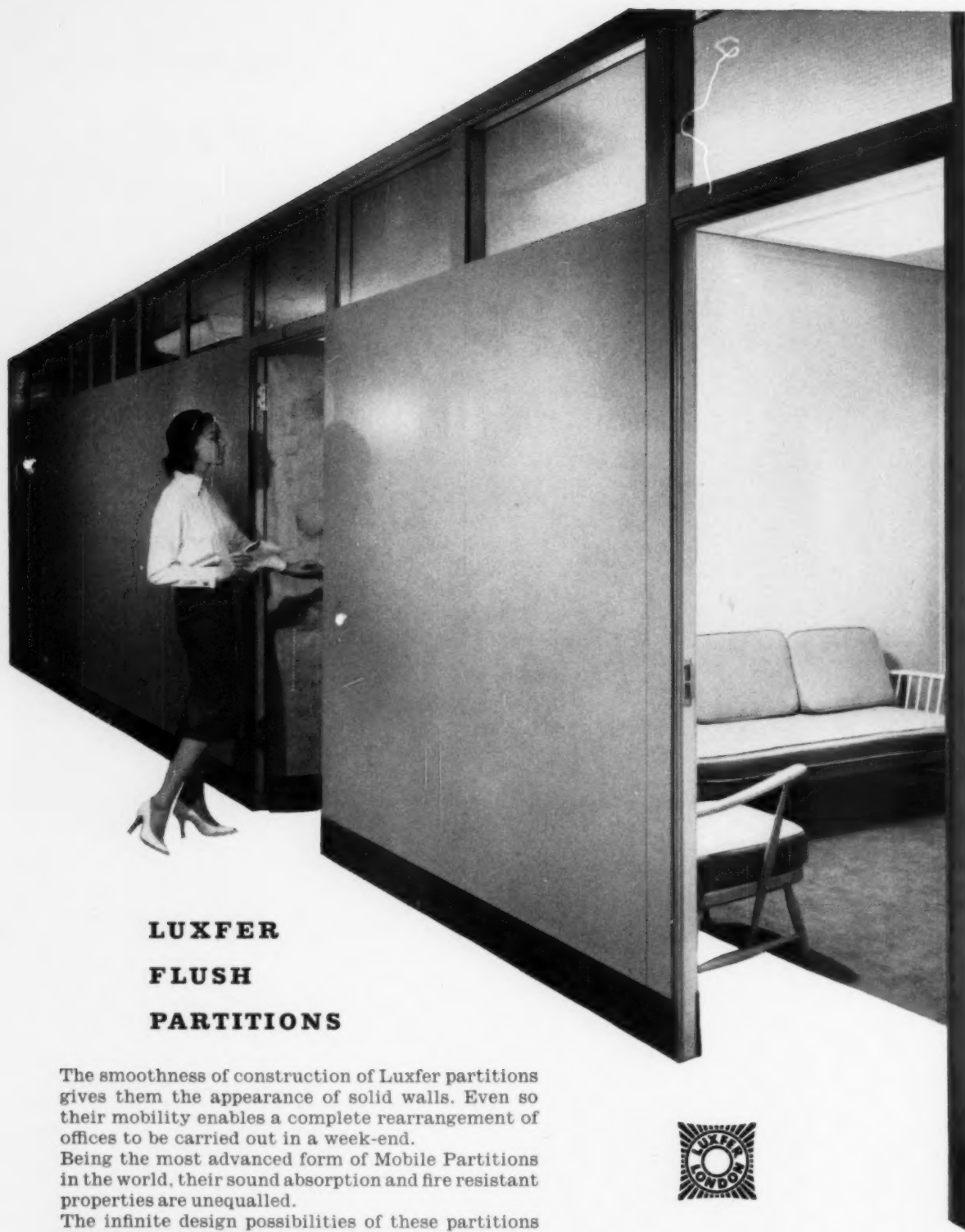


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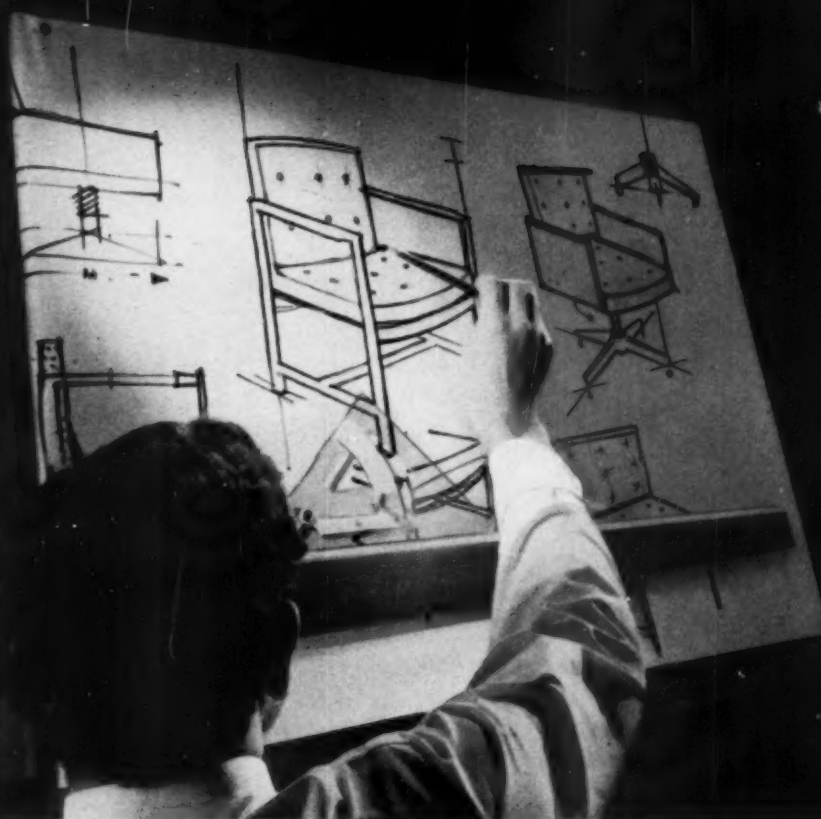
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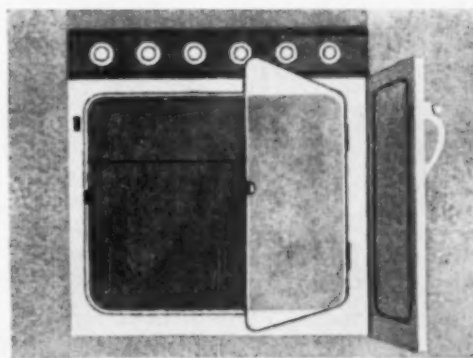
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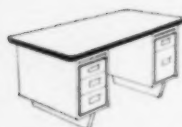
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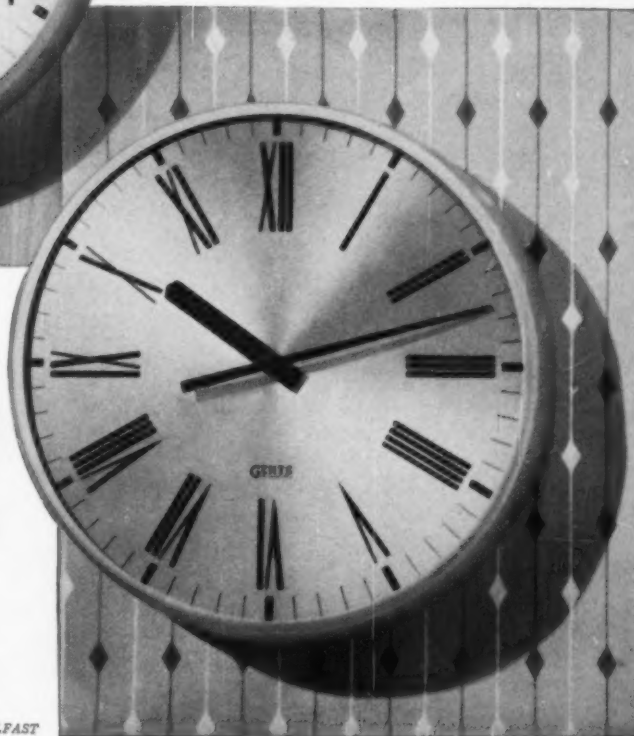
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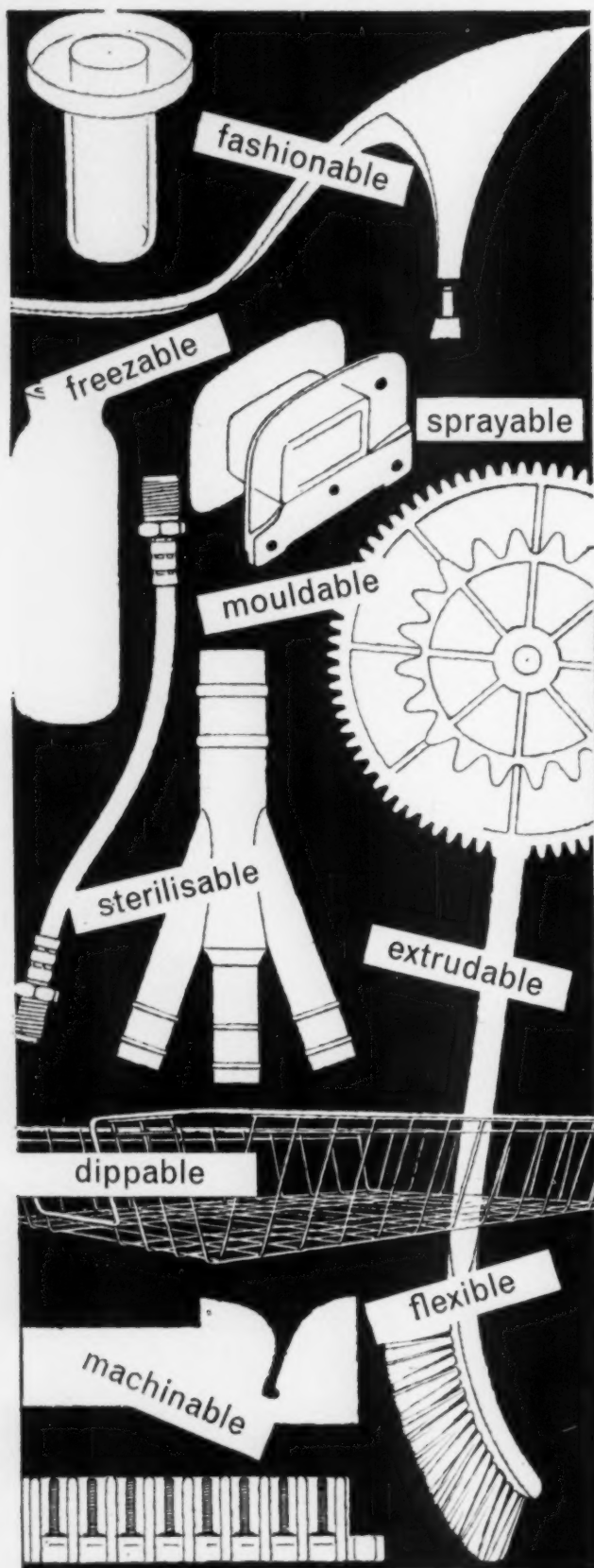
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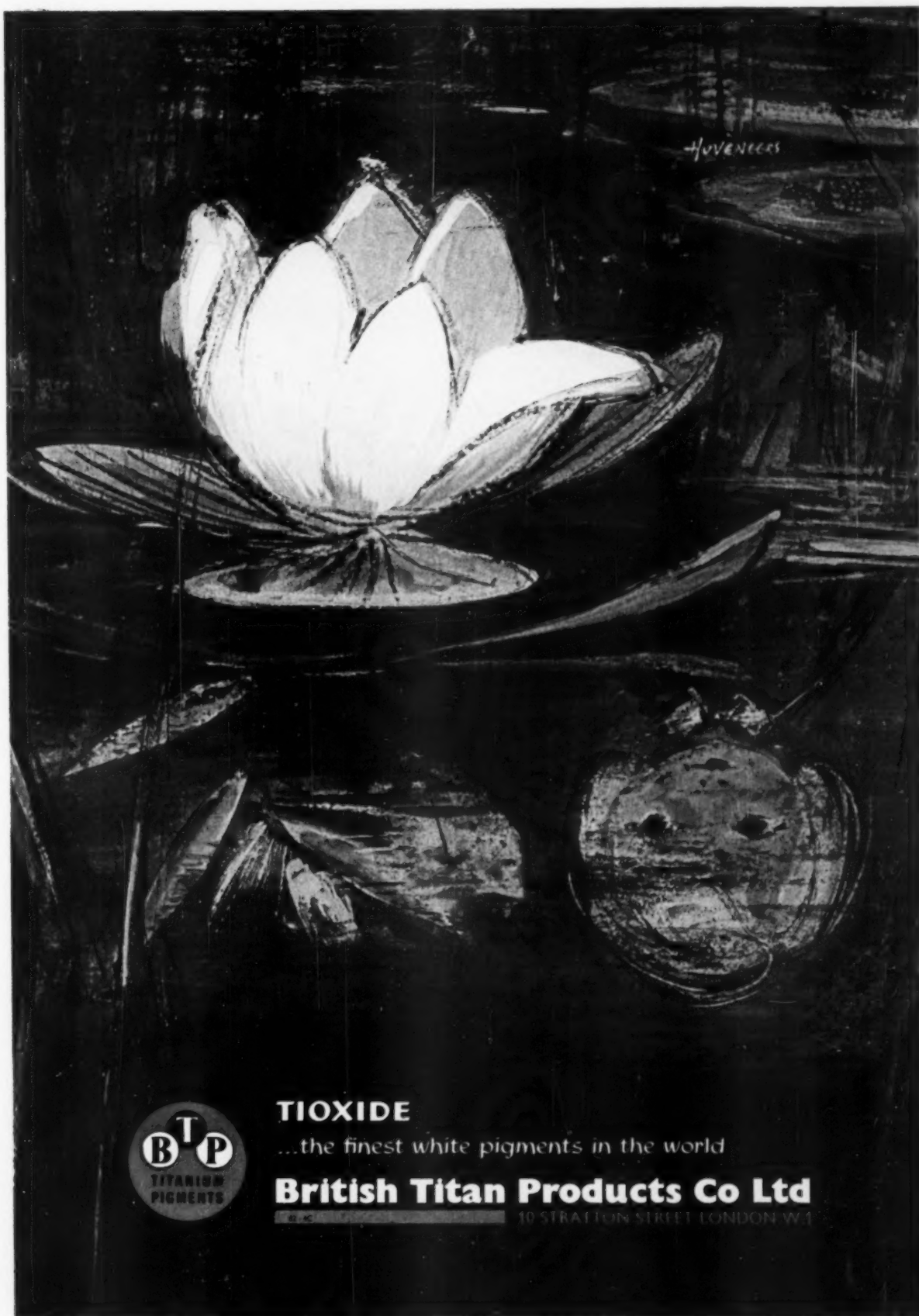
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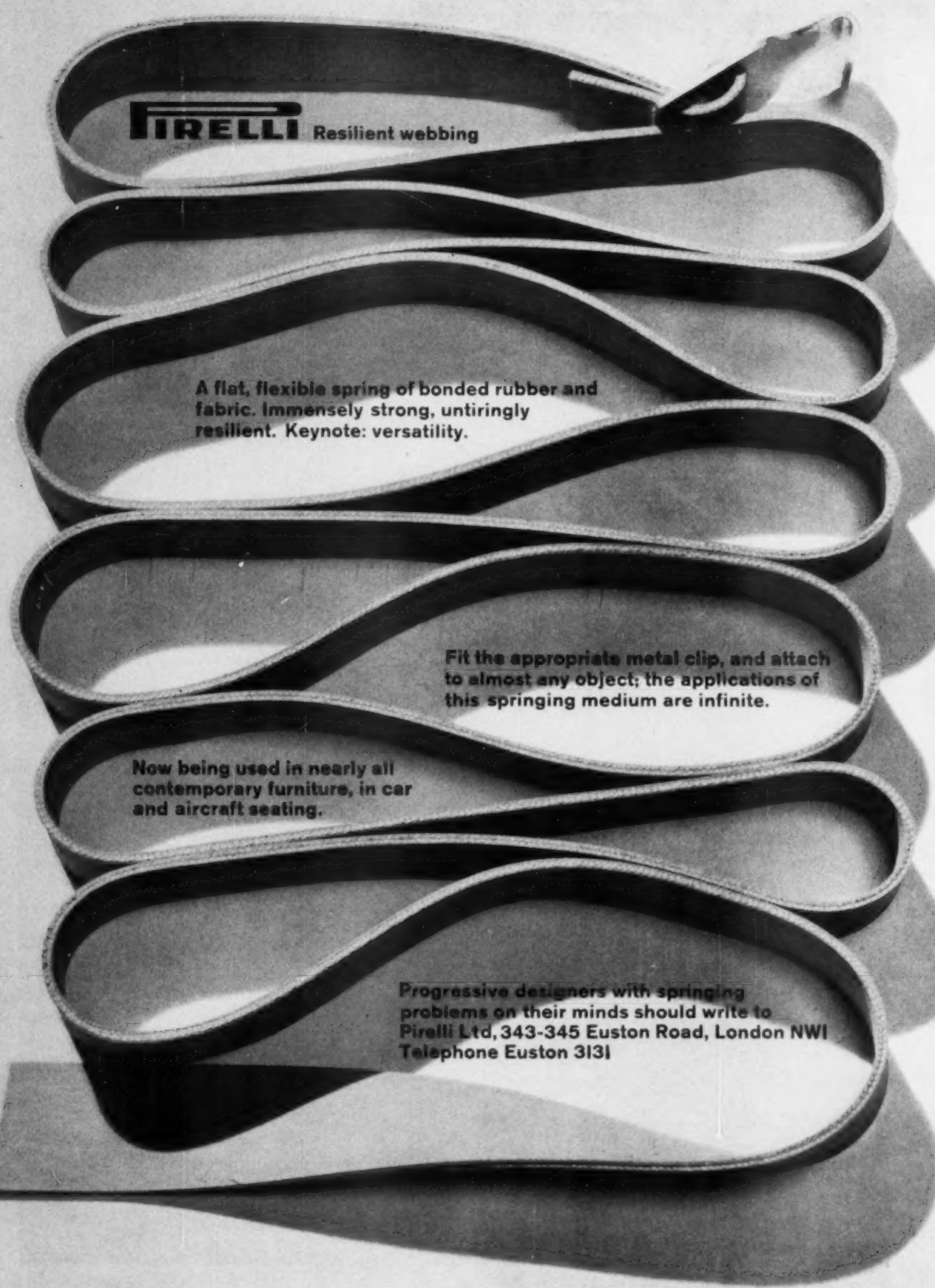
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Bus-side signs made from 'Perspex' acrylic sheet have been fitted to buses belonging to the West Yorkshire Road Car Co. Ltd., a member of the Tillings Association.

The brilliant new idea of making illuminated bus-side signs in 'Perspex' is spreading. Here is one of the Harrogate buses which are now carrying these colourful, hard selling, day and night advertisements. The sign is 17 ft. long and 21½ in. deep, and consists of three panels of ⅝ in. clear 'Perspex' cut from 6 ft. long sheets. The sheets are jointed by means of a cover strap system—a clear 'Perspex' strap is cemented to the panel nearest the front of the bus and the next panel is fitted underneath. The panels can easily be moved, but each joint is completely waterproof. The sign is mounted 1½ in. clear of the inner skin to give room for ten 2 ft. fluorescent tubes. These are run off the bus batteries, using a transistorised converter. The advertising message is screen printed on the inside of the sheets. If the message has to be changed frequently, however, paper posters can be stuck on to the sheets.

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# Design

153 September 1961

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## the point of **USE**

At the *International Packaging Exhibition\** this month a cavalcade of materials, processes, machines and ideas will be brought together at Olympia to promote what has become one of the most flourishing of modern industries. No doubt at the end of its 10 days' run many visiting manufacturers will be persuaded to introduce new types of pack to fit their products, and others to change their products to suit some revolutionary packaging system. And as we listen to the marketing experts quoting statistics that point to increased sales, expanding on the changing pattern of selling and the need to fight competition with modern weapons, we cannot help wondering what the consumer must think of it all, and if he has perhaps been overlooked in this big world of big business.

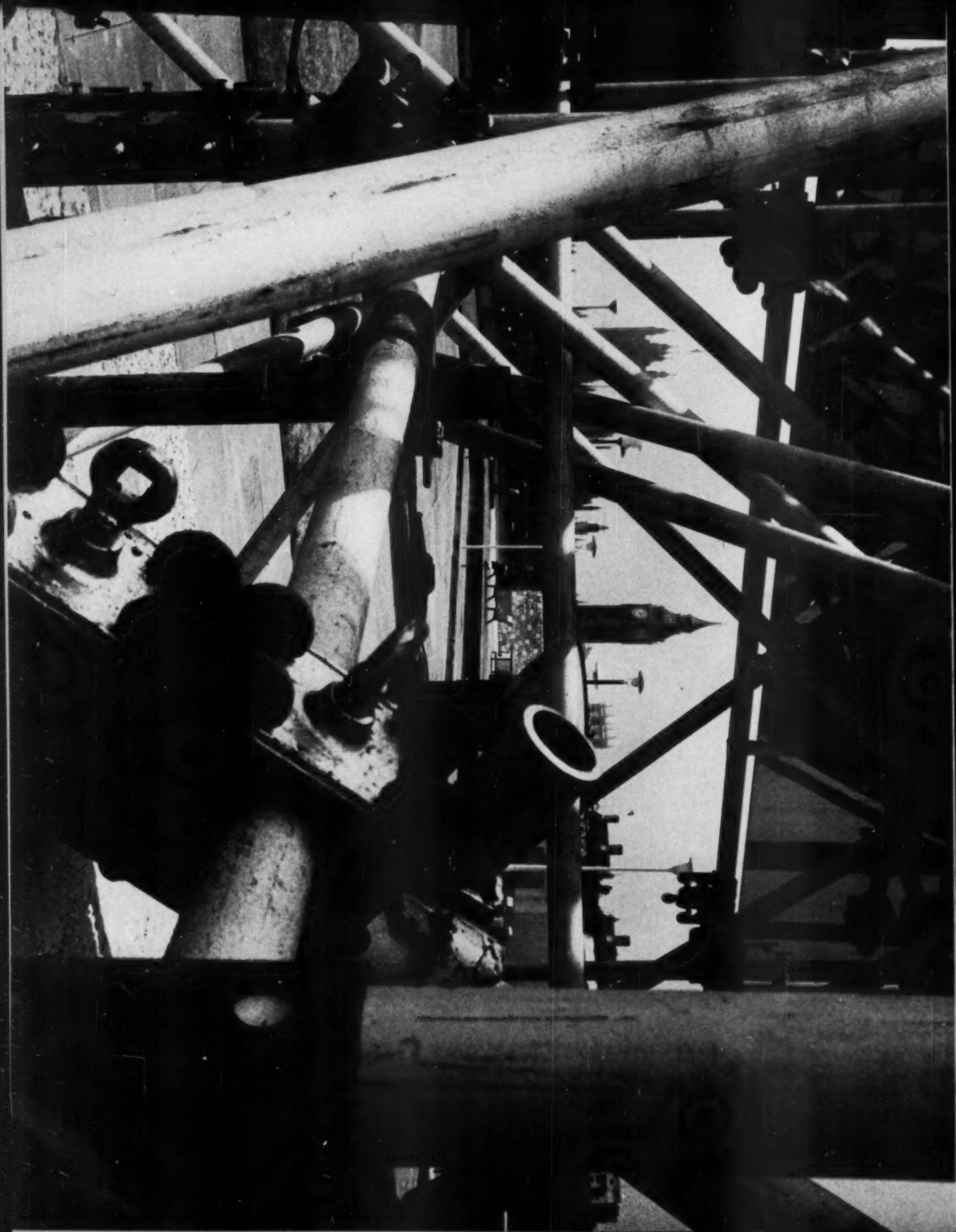
It is, after all, the satisfaction of the consumer that is, or should be the ultimate objective of all this activity. And certainly the packaging industry has done much to ease some of the more tedious burdens of the daily grind. The aerosols, the polythene tubes of cream or paste, the handy liquid-soap dispensers, are a few of the useful innovations that have been introduced in the last few years. That all is not rosy, however, is evident from the periodic outbursts among angry housewives whose complaints will be familiar to most of us: the instruction 'Press here to open' which results only in a dent and a broken finger nail, the detergent carton which deposits its contents through its soggy bottom on to the draining board, the screw-on cap which only father can remove.

Such complaints tend to confirm the feeling that much of the design research that is carried out by, or on behalf of, the packaging industry is directed at the point of sale rather than at the point of use. Considerable publicity has been given recently to scientific methods of testing the effectiveness of the graphic content of package designs and while no one would dispute the value of such methods, it is not always realized that selling the product is only one of the many functions a package must fulfil.

The fact is that packaging today is a complex and involved art and it is hardly surprising that one or other of its functions is not infrequently overlooked. Surely there could be no better discipline for a young designer in this field than to trace and note in detail everything that happens to a package from the time it is first stamped out of flat sheet through all stages of its existence until it is finally abandoned by the housewife to the dustbin. Such systematic research into user needs would go a long way towards pinpointing those basic functional requirements of package design that at present seem to be forgotten.

JEB

\* *International Packaging Exhibition*, Olympia, September 5-15.



# POINTERS

## Generation

The end-of-year exhibitions of students' work must provide a depressing experience for those practising designers who make the annual pilgrimage to their old art schools and colleges to see what the younger generation is up to. Depressing not because, as we are so often led to believe, the younger generation is a feckless product of the welfare state, but because the galaxy of talent displayed is enough to make even the most successful designer feel a little bit like a cowhand at a smart cocktail party.

Certainly the recent displays at the Royal College of Art and the LCC Central School of Arts and Crafts, particularly as far as the product design sections were concerned, revealed a most impressive advance on previous years, both in the quality and quantity of the designs on show. The scope of the work, too, was more ambitious, embracing such things as an executive aircraft interior and a range of machine tools. Immaculately-made full size or scale models were a common characteristic of both exhibitions. We came away with the feeling that here was a real challenge to the fustian standards that seem too readily accepted by all of us.

## Electrical fellows

That industry too is beginning to sit up and take notice of these growing reserves of design skill is suggested by a recent announcement of a new research fellowship awarded to the Royal College of Art by the English Electric Co Ltd. The fellowship, which is worth £750 per year, is to allow young designers to carry out post graduate research for a year on the design and use of domestic electric appliances. The successful candidate will be chosen each year by a committee of college and English Electric staff, from a group of students whom the committee consider to have produced the best work.

This offer is generous and farsighted, and indicates a growing conviction in industry that our competitive position in world trade will depend more and more in the future on the superiority of our designs.

## Flat for Poplar

Another ambitious student exercise of a rather different kind was carried out by the Technical College for the Furnishing Trades at Shoreditch. A group of students was set the task of making, mostly to designs by members of the college staff, all the furniture needed for a flat typical of many now being built by the LCC. If at times a trifle lacking in refinement, the designs were nevertheless well made, ingenious and tasteful and in most cases would be extremely cheap to produce; it is hoped that at least some pieces will be taken up by manufacturers. Later the

furniture will be shown in an actual block of flats now being built at Poplar. The whole exercise was a particular tribute to the staff who have succeeded in bringing about a remarkable transformation at this trade college where students are now taught to understand the full meaning and value of good modern design.

## More centres for better trade

The American Trade Centre which opened in London recently must have been a disappointment to those who have been used to basing their ideas of American design on photographs which appear glossily in the pages of thick magazines. Major kitchen appliances were as big, heavy and slick, but not quite so glamorous, as we had expected. There was some pleasant cooking ware with stylishly modelled handles and knobs, the inevitable barbecues ranging from elaborate trolley-like devices to simple covered pans on stilts, useful looking plastics ice-boxes and decorated melamine tableware that never looked quite right. There was some ingenious garden furniture that looked awful and a wide variety of household equipment that was not so very different from the normal range of merchandise that one would find in any typical British hardware store.

While the American centre may have impressed visitors more had it been organized on a selective basis, the commonsense of exhibiting goods in the markets where they are to be sold seems obvious. Surely it is time that we in Britain took a leaf out of the Americans' book and set up our own design centres in key cities abroad.

## Quiet revolution

The highly selective display of designs from countries at this year's *Interplas* exhibition reminded us forcibly of the quiet revolution in our everyday lives that has been brought about by the plastics industry. Hardly a single item in our domestic environment, it seems, exists without some component being made of one of the many types of plastics material now available. The international display, by far the best there has been so far, demonstrated the diversity of application now possible. At the one extreme the Danes showed how melamine used for a range of heavy, covered jars with machined surfaces, could become a material of rare quality. At the other, the Canadians showed how glass fibre might well replace painted cast iron to meet the tough utilitarian requirements of a post box. But for the normal run of domestic products it was the Germans who stood out far above their neighbours for the strength, directness and simplicity of their designs. How expertly they disproved the idea that plastics are merely cheap substitutes for traditional materials.

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## ◀ Art editor's page

Close-up of the tower designed by John Ernest as part of the exhibition at the International Union of Architects sixth congress. Lawrence Alloway writes: "Through the scaffolding of the tower the sight of Big Ben was a reminder of the aesthetics of contrast (buildings in polemical and antagonistic relation) which is an essential, but generally ignored, factor in town planning". The probability that you, the reader, did not realise that the photograph was turned sideways until you spotted Big Ben, points the difference between the two structural forms. For more views of the exhibit see pages 60-62. Photograph by Robert Freeman.



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SURVEYS OF INDUSTRY No. 5

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# FURNISHING FABRICS

British industry has often been criticised for failing to make a positive contribution to the Modern Movement in industrial design. Sweden, Denmark, Italy, it is pointed out, have all made their own characteristic marks on the modern world, while in this country new designs are too often pale interpretations of what is already well established abroad.

It would be wrong to deny the validity of these criticisms – at least in part. But it would also be wrong to assume that they apply equally to all industries. There are some notable exceptions, and among them the furnishing fabrics industry has perhaps done more than any other to show that design can be modern in outlook, British in character, original in conception and outstanding in quality.

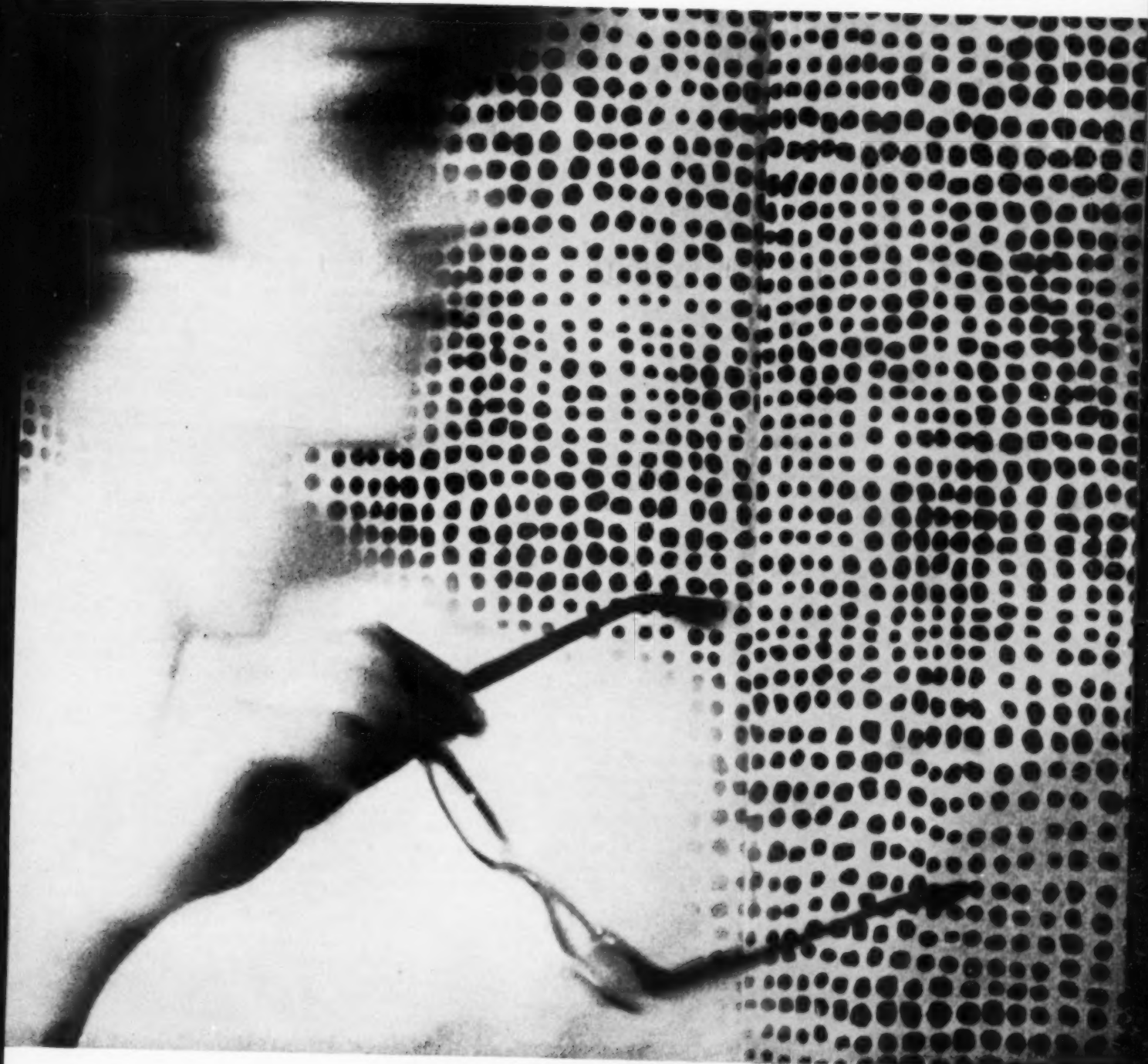
This achievement is respected abroad even if it is not fully understood, for it is recognized that it has grown from roots which go deep into the past – the 1960 Victoria & Albert Museum exhibition, *English Chintz*, showed the strength of this tradition. Strangely enough, the leading designers and producers of modern British furnishing textiles have not shown a particularly consistent development since the war. The last 10 years have revealed a torrent of influences and changes which have been tumbling over each other at an ever increasing pace – small scale ‘contemporary’ abstracts, modern florals, textures, big scale patterns, action painting, and more recently stripe effects and the influence of William Morris and *Art Nouveau*.

How long can this process be maintained? Many architects and interior designers are beginning to feel that they have had a surfeit of pattern and believe that curtains should play a quieter role as an architectural component of a room. Effects gained by plain colours are being increasingly attempted.

No doubt this is an inevitable reaction, but it also has value if it causes designers and manufacturers to reflect on the dangers of constantly forcing the pace of experiment and change. Much may now be gained from a real attempt to create a more lasting idiom, and a return to plain colours and simple effects may provide a basis on which to build. Good plain colour ranges certainly exist in British furnishing fabrics, but it should be possible to develop these by giving more attention to interesting new constructions and plain effects which are not necessarily solid colour, piece dyed. At the same time, it must be recognized that there is an established market for patterned material both at home and abroad, and that British producers have a special place in it. New developments growing logically out of the current reaction from aggressive pattern could ensure that Britain maintains or even extends her place in these markets.

The following pages have been planned as a gallery of modern furnishing textiles, and most of the styles and influences already mentioned are illustrated. The satisfactory performance of furnishing textiles in use is just as important as that of other products and some pages of factual background have, therefore, been included, for it is important that manufacturers, the retail trade and the public should have as common ground the standards of performance that can reasonably be expected.

*Photographs by Kenneth Garland*



## NATURAL FIBRES

**Cotton** A versatile fibre, and basically an inexpensive one. Cotton cloths are widely used for both printed curtaining and loose covers. Patterned woven furnishings may be all cotton, but cotton is also mixed extensively with other fibres.

**Linen** Similar chemically to cotton, but more expensive, and gives a firm, hard wearing, lint free cloth. Principal furnishing application is loose cover material. Cotton/linen unions are very important.

**Wool** Relatively expensive, but warm, resilient, dyes well and 'wears clean'. Rarely used for curtainings or loose covers, but excellent for upholstery.

**Silk** Very expensive, but has excellent qualities – the characteristic texture, a fine subdued lustre and the prospect of rich subtle colours which are not, however, as fast as can be achieved on other fibres. Used in small quantities for high grade curtaining and upholstery material. Silk, being a fine, expensive material, needs to be used with proper care.

## MAN-MADE FIBRES

**Cellulose** Viscose rayon: cheaper than most cottons, it is produced in greater quantities than any other man-made fibre. Available either in continuous filament form or 'spun'. The latter is difficult to distinguish from cotton, though it is not so strong, especially when wet.

Acetate: a more delicate fibre, often used in woven patterned curtaining because it can be 'cross dyed' with cotton or viscose; ie, in piece dyeing, separate colours are achieved on the two fibres woven together in the same cloth.

**Polyesters** 'Terylene': an expensive, but strong and extremely durable fibre, with low moisture absorption. Terylene has very good properties on exposure to sunlight, and is extensively used in the manufacture of lightweight curtain nets. It is also beginning to be applied in upholstery.

**Polyamides** Nylon: also expensive, and with similar properties in respect of strength, durability and low moisture absorption, but it is not suitable for net or lightweight curtains. It is being increasingly applied in upholstery.

**Protein and Acrylic** 'Fibrolane', 'Acrilan', 'Courtelles', 'Orlon': these fibres have wool-like properties, and may be used in upholstery cloths in blends with wool.

**Polythene and Vinylidene chloride** 'Courlene', 'Tygan': fibres which are non-moisture-absorbent, with high strength and toughness. Principal furnishing application is as deckchair and awning fabric.

**Glass** Has the great advantage that it is flameproof and, therefore, safe as curtaining where the fire risk may be important, as in public buildings. Available in translucent nets and also in more opaque plain colours and printed designs. Glass is non-moisture-absorbent, therefore washing is quick and no ironing is required. Glass fibre has low abrasion resistance so, in washing, the fabric must be carefully handled. For the same reason, glass fibre fabrics are unsuitable for any form of upholstery. Glass fabrics should not be dry cleaned. For making up, special instructions are available, since extra care is necessary with stitching frequency and tension.

## WEAVES

Most curtaining and loose cover fabrics are woven, ie, they are produced on looms by the interlacing of warp threads with cross-wise weft. For lightweight curtain nets, weaving is not the only possibility. For such materials, lace and warp knitting are important processes.

**Plain weaves** A well balanced plain cloth of appropriate weight is the most economical and practical for many furnishing purposes. There are, however, many ways of giving a special character to cloths of plain weave. Some of the plain fabrics used for furnishings are

Cretonne: a plain cotton cloth with printed pattern.

Chintz: a glazed, printed, plain weave fabric usually lighter than a cretonne. The pattern will often be floral, but not necessarily so. The word is also used, as in the 1960 exhibition of *English Chintz* at the Victoria & Albert Museum, to cover all printed cotton furnishing fabrics.

Percal: a closely woven plain cotton cloth, light in weight.

Poplin: a fine plain cloth, with a regular weft-way rib.

Repp: plain, with a prominent weft-way rib, normally of coarser construction than a poplin.

Crash: a fabric originally of linen, with thick uneven yarns giving an irregular appearance. Usually plain weave.

**All-over textures** As an alternative to plain, many cotton fabrics for printed curtaining are what are called 'bark cloths' – cloths of apparently simple all-over texture attained by use of a crêpe weave. Similarly, some furnishing fabrics for printing and plain dyeing have slub yarn (ie, yarn of uneven thickness) as weft.

**Satins** The smooth surface of a satin weave gives extra lustre and richness. The character of a satin fabric is greatly affected by the nature of the fibre on the surface of the cloth – rayons, for example, tend to be more shiny than mercerised cotton or silk. The smooth regularity of the satin may sometimes be broken by slub or other fancy wefts to produce so called 'antique' effects.

There are other variants such as cubaleen – a fine weft satin in cotton, ideal for high grade printed effects.

**Pile fabrics** Velvets, velveteens, corduroys and chenilles. Fabrics of widely varying price and of smooth or broken pile with appearance and character dependent on whether the pile is of cotton, rayon or silk.

## PATTERN EFFECTS

The ingenuity of the designer is virtually the only limit to the number of pattern types possible in woven cloth. The simpler effects are produced on looms with dobby attachment. The more complex designs need Jacquard machines. There are nevertheless some established basic styles for curtaining and loose cover fabrics.

**Damask** Figured fabric in which the pattern is achieved by the interchange of warp and weft satin weaves.

**Brocade** Fabric with Jacquard figuring, often with a variety of colour and lustre interchanges resulting from the use of satin and other weaves. Two or more wefts are often used. Brocades are usually in silk, rayon or mercerised cotton.

**Brocatelle** Heavy figured cloth featuring a satin weave against a closely woven background texture. Two or more wefts are used, and sometimes two warps.

**Tapestry** Closely woven figured fabric of compound structure. The pattern is developed by the use of coloured yarns in the warp or weft or both. Normally more applicable to upholstery than to curtaining.

**Folk weave** A loose description applied to a wide range of effects of open weave using coarse yarns – probably in several colours and often with a check effect.

**Modern textures** Again a very loose description to cover a wide range of experiment in recent years. This has resulted in fabrics more sophisticated than folk weave styles, which make good use of woven texture, frequently of fancy yarns, and often of a variety of fibres.

## DYES (FASTNESS)

Colour fastness is of obvious importance in fabrics to be used for curtaining or as loose covers. Such fabrics need to be washed or dry cleaned regularly, and curtains, in particular, must withstand the effects of prolonged exposure to sunlight. There are limitations to the degree of colour fastness obtainable – especially at a given price – so it is necessary to define the most important requirements. These are fastness to:

**Light** To the direct effects of sunlight must be added, according to locality, the effects of sea air and the pollution of industrial atmospheres.

**Washing** The best fabrics and dyes may, in any case, be ruined by unduly severe washing treatment, for example by high concentrations of bleach or detergents, or by inadequate rinsing.

**Wet rubbing** Linked in practice with fastness to washing.

**Dry cleaning** Not all curtain fabrics are suited to being washed. Velvets, chenilles, tapestries, fabrics containing silk or wool and heavier fabrics containing rayon should be dry cleaned. The make up of curtains may also make dry cleaning preferable.

**Dry rubbing** Very important in fabrics which may be used for loose covers.

## DYES (DYESTUFF GROUPS)

Wool and silk, and the man-made fibres other than viscose rayon, cannot be dyed to quite the same fastness standards as cotton and linen.

With cotton, linen or viscose rayon fabrics for curtains or loose covers, the dyestuff possibilities are:

**Vat dyes** The most reliably fast to all the above agencies. Vat dyes are, unfortunately, expensive, both as dyestuffs and in their method of application. Their cost varies from light to dark shades, some of the darker colours being very expensive indeed.

**DFL dyes** Cheaper, especially as they are easier to apply. They are reasonably fast to light, but less fast to washing. The use of DFL colours may well be justified on curtaining intended for dry cleaning or on cheaper priced curtainings retailing at 5s 11d or 6s 11d per yd. A guarantee of colour fastness should not be expected.

**Ordinary Commercial dyes** Cheaper still and, while reasonably fast to washing, not particularly fast to light. Generally unsuitable for furnishings.

**Pigment dyes** Good strong colours with a 'painted' look. Good fastness to actual washing, but not very good to wet rubbing. Some pigment colours are not fast to all dry cleaning solvents. Pigment dyed fabrics are, therefore, preferably cleaned by washing. As pigment dyes tend to stiffen the fabric, they are usually easily recognized.

**'Spun dyed' colours** Man-made fibres may be coloured by pigment dispersed in the spinning solution prior to extrusion of the filaments. 'Spun dyed' viscose rayon is extensively used in woven patterned furnishings. The colours are very fast.



## METHODS OF PRINTING

The methods of textile printing are:

- Hand block** An ancient skill still used and capable of producing effects not otherwise possible. For modern work, hand block printing has been almost entirely superseded.
- Hand screen** Has the great merit of high flexibility of operation. The first cost of making screens is not prohibitive and runs of as little as 100 yd are feasible. The ability to produce short runs of designs for an exclusive market is often valuable. But the cost of printing by hand may be several shillings a yd more than printing by machine.
- Machine screen** Has been introduced extensively in the last few years. The screens cost no more than for hand printing, but an automatic and much quicker printing process necessitates runs of at least 300 yd each colourway. Machine screen printing has filled the gap in price, and in the minimum yardage required per design, between hand and roller printing.

**Roller** Usually by engraved copper rollers. The engraved areas on the rollers retain the dye for printing on to the fabric. The smooth areas on the roller are wiped clean by 'doctor' knives. Printing by engraved copper roller is much the most economical method, but the engraving of rollers is expensive. Once a machine has been set up, long runs are necessary, partly to recoup the cost of engraving, but also to gain the benefits of productivity from a large, complicated and fast running machine.

## FINISHES

The nature of a fabric is determined, in the first place, by the type of fibre from which it is made. The method by which the fibre is spun is the next factor, and then there is the choice of weave or other method of manufacture. After dyeing or printing, the final influence is the finish applied. The finish may be no more than a hot pressing or slight firming up of the fabric. Some finishes are much more permanent than others.

For curtaining and loose cover fabrics the more important treatments and finishes are:

- Mercerising** Applicable to cotton or linen and, in practice, carried out before dyeing or printing. It is a process, discovered many years ago, whereby the lustre and dyeing properties of the fibres are improved. Cotton satin curtainings for printing or plain dyeing are usually mercerised.
- Glaze finishes** Applied particularly to cotton curtaining, and closely associated with traditional and modern chintz designs. Although glaze finishes are now much improved in permanence, the finish does tend to be lost in laundering. Re-glazing is undertaken by some dry cleaning firms.

**Shrinkage control** Shrinkage of curtains in washing can be a great nuisance, especially when they have been made to sill height. Some shrinkage is virtually impossible to prevent, and on untreated fabric five per cent shrinkage (3 inches in 5 ft) is not excessive. Allowances for this should be made in headings or hems when making up. It is obvious that shrinkage in loose covers is equally undesirable.

Liability to shrink can be much reduced by special finishes. Either the fabric may be pre-shrunk to limit further shrinkage, or a resin additive may be impregnated into the cloth to give dimensional stability. A small shrinkage tolerance of perhaps one per cent is still necessary. These finishes do put up the price of furnishing fabrics, and both are subject to certain limitations. When used, the fabrics are normally labelled by the manufacturer to indicate the extra processing that has been applied.

**Flame proofing** Flame proof curtaining materials are increasingly called for in contract work. Glass fibre and wool are naturally flame proof. Most cotton, linen and viscose rayon fabrics ranging from velours to nets can be given a flame proof finish. The degree of permanence against cleaning varies with the fabric, so advice should be sought about the most appropriate method of cleaning and possible reproofing afterwards. Furnishing fabrics with a flame proof finish have not as yet entered the normal retail trade.

Retail prices quoted are approximate, and include purchase tax. There may be an additional cutting charge in some cases.

The effect here is neat, and the fabric achieves a quality look by careful colouring. This inexpensive material will be frequently used, no doubt, as curtaining for small windows. It could also bring freshness and originality to a more ambitious scheme. *8885 BG*, a printed stripe on plain cotton; available glazed or unglazed in seven colourways, in a 48 inch width. *11s 9d per yd.*  
DESIGNER *M. J. White*. MAKER *Turnbull & Stockdale Ltd.*

A gallery of modern furnishing fabrics



A design of dominating strength and character – partly because of the boldness of the stripe effect, but also because of the obvious *Art Nouveau* origin of the idea. *Taro 0068*, printed on heavy mercerised cotton satin, available in four colourways, in a 48/50 inch width. £1 13s 9d per yd. DESIGNER Shirley Craven. MAKER Hull Traders Ltd.



The design partnership between Lucienne Day and Tom Worthington of Heal Fabrics Ltd has been particularly successful, and has shown a consistent but developing style over the years. Even more satisfying is the knowledge that a design such as the one illustrated is so inexpensive. *Cockaigne*, a printed cotton, available in six colourways, in a 48 inch width. 12s 9d per yd. DESIGNER *Lucienne Day*. MAKER *Heal Fabrics Ltd*.

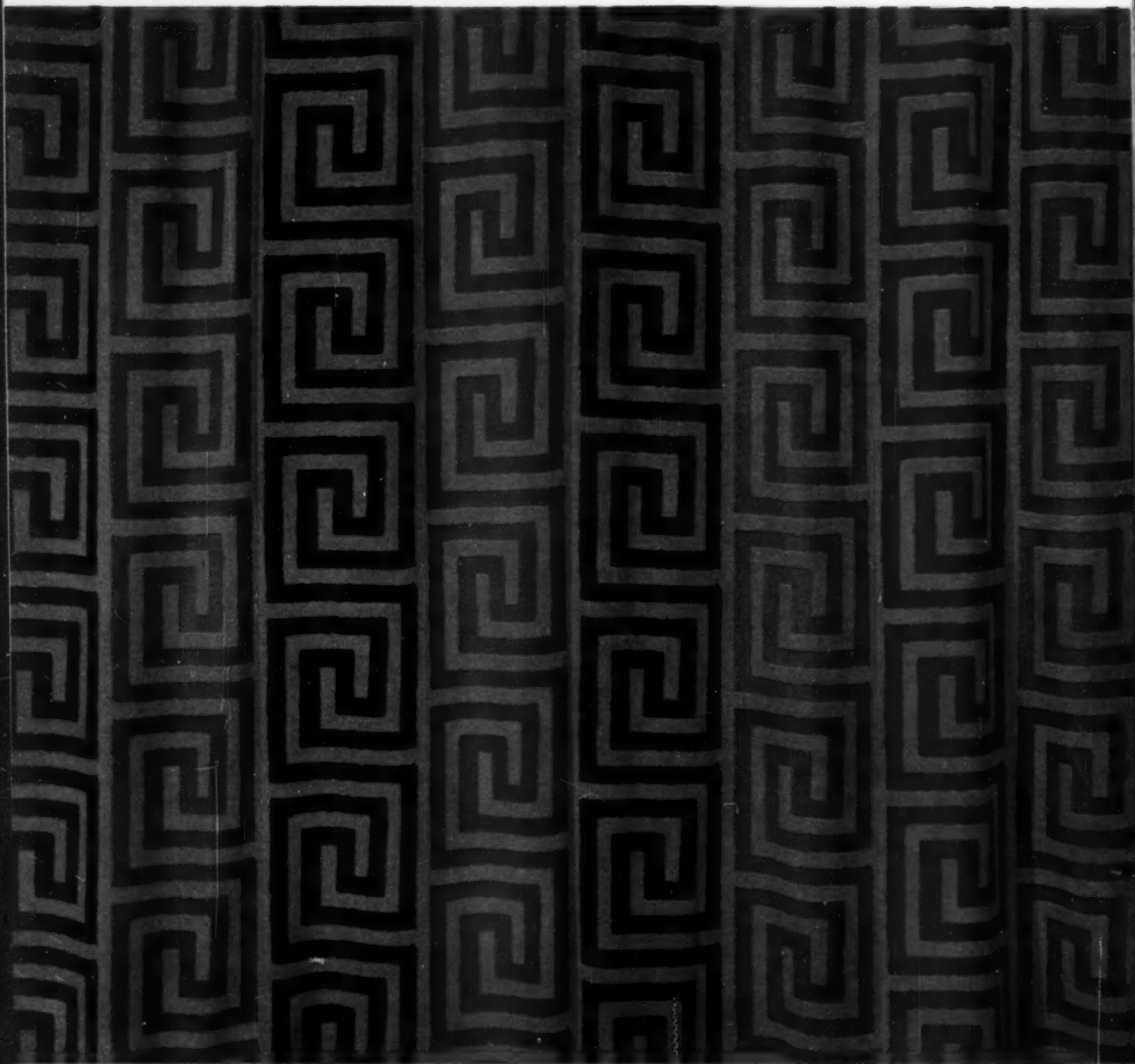
Furnishing fabrics





This motif could hardly be more traditional, yet the design would be successful in a modern setting because of its bold scale and confident use of colour.

*Parthenon 60129 colour 2*, a machine screen printed cotton; available in four colourways, in a 48 inch width. 17s 9d per yd. DESIGNER *Verena Junker*. MAKER *Morton Sundour Fabrics Ltd.*



The motif is reminiscent of the early days of 'contemporary' design, but the scale makes all the difference. This is a design which would enhance the right setting, but the interior would have to be such that it could absorb the impact of such a forthright effect. *ZE 890, colour 1*, a printed cotton in an Everglaze finish; available in two colourways, in a 48 inch width. £1 2s 6d per yd. DESIGNER *Christine Risley*. MAKER *Sanderson Fabrics*.



This design, based on the simple buttercup, is freshly drawn and original in approach, showing that there is still plenty of scope for new interpretations of traditional flower motifs. The colourings have been chosen with particular care. *Ranunculus 0062/598*, a printed cotton, in a glazed finish; available in three colourways, in a 48/50 inch width. £1 3s per yd. DESIGNER *Mary Harper*. MAKER *Edinburgh Weavers*.





This linen/cotton union fabric is equally suited for use as curtaining or loose covers. Good modern design for loose cover material has been relatively neglected; and the *Daedal* range, from which this design comes, offers a welcome and comprehensive group of neat, simple and well coloured effects. *Pleiades DR 30*, a printed linen/cotton union; available in four colourways, in a 48 inch width. 13s 6d per yd. DESIGNER Edward Pond, MAKER Bernard Wardle & Co Ltd.

Furnishing fabrics





A print design on glass fibre fabric, a material which eliminates the risk of fire. The pleasantly neutral abstract design is supported by appropriately soft colour effects. G70, design 5496, printed on glass filament; available in five colourways, in a 46 inch width. 14s 11d per yd. DESIGNER *Pat Albeck*. MAKER *Vetrona Fabrics Ltd.*



A distinguished design which results from the orderly approach and evident restraint in applying the 'action' painting technique. The fabric chosen is a rayon satin which emphasizes the visual impact of this striking pattern. *Zyko, colour Mushroom*, printed on a rayon/cotton satin; available in six colourways, in a 50 inch width. £1 13s per yd. DESIGNER *Doreen Dyall*. MAKER *Gayonnes Ltd.*



Miki Sekers and West Cumberland Silk Mills Ltd have long been making an outstanding contribution to fabric design for high fashion. The entry of the firm into furnishings is thus a notable event. The fabrics so far produced are weave effects – from colour blends to stripes, checks and Jacquard patterns. All are supported by fine colour ranges. *Maestro 1001E* (the check effect), a yarn dyed rayon fabric, available in a 48 inch width in 42 colourways, for minimum orders of 10 yds. £1 19s 11d per yd. Other fabrics, left to right: *Orient 60C*, 59, 64A (used here as a dress fabric), and 123A in yarn dyed rayon/silk; available in 94 colourways, in a 48 inch width (again with a 10 yd minimum). £2 5s 11d per yd. DESIGNER Miki Sekers, MAKER West Cumberland Silk Mills Ltd.



Danasco Ltd is an established importer of Scandinavian textiles, furniture, pottery and glass. Recently Danasco Fabrics Ltd was formed as a subsidiary company to produce furnishing fabrics in Britain (mainly by British designers). This design is overprinted on a piece dyed ground. *Rayne colour 1*, a screen printed cotton; available in two colourways, in a 48/50 inch width. £1 4s per yd. DESIGNER *Rayne Walker*. MAKER *Danasco Fabrics Ltd*.

Furnishing fabrics





The heavy linen, reminiscent of a cottage weave fabric, gives basic character to this strong and simple effect, which is suitable for both curtaining and upholstery. The other colourings are equally subtle. *Cawdor Stripe* col 778, a woven linen, available in six colourways in a 50 inch width. £1 10s 5d per yd. MAKER *Donald Brothers Ltd.*



## WEST END WAREHOUSE

An example of a comprehensive design policy stemming directly from presentation and products can be seen in the new showroom for Conran & Co Ltd at 5 Hanway Place, off Tottenham Court Road, London. The interiors have been designed by Conran's own design group and carried out by its contracts division.

The building was built as a warehouse in 1882, and is of straightforward functional brick construction with robust detailing. Outside, the original arches have been opened up and glazed over, and into this simple skeleton



a reception lobby, showroom, sample rooms, offices, workrooms and storage have been fitted.

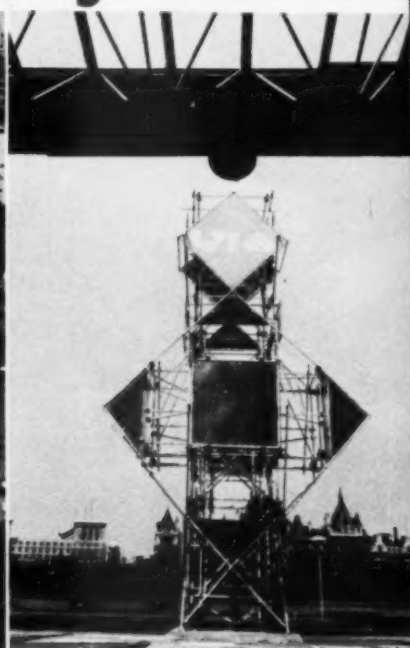
The main showroom, ABOVE, is 100 ft by 30 ft wide and allows for the display in simple groups of the company's furniture. The left hand wall is partly panelled in hemlock with the brickwork to the old chimney breast left unplastered and painted white. The right hand window wall is curtained full length and height in a white wool sheer fabric. Above the louvred pine ceiling are the original timber roof trusses.

The re-designed building reflects the design policy of this young and energetic company. The use of simple finishes throughout gives the whole a spacious and unpretentious atmosphere, providing both an introduction to the design policy of the company and an effective backing to the display of its furniture and fabrics.

STEPHEN GARRETT

# ARTS & CRAFTS

## architecture, industry and art



### LAWRENCE ALLOWAY

For the International Union of Architects' sixth congress, held this time in London, Theo Crosby designed two elegant temporary buildings on the site of the old Dome of Discovery. Though modest in scale and execution these had a forceful brilliance and an international flavour appropriate to the occasion. The containing circle is clearly seen in **2**: on the right is the headquarters building with an ingenious roof system of aluminium pyramids; left is the exhibition building, with, on its left, the west courtyard. The buildings, assembled from prefabricated components, used scaffold boarding for walls (providing hoardings for the artists' panels and Edward Wright's signwriting, **1**, as well as rails and counters); these contrasted with the precise aluminium framing of the structure.

Though small, the buildings bulged with visual displays and a chain of outstanding examples of what is called 'synthesis'. That is

to say, collaboration between artists and the architect and with industrial firms. The British Aluminium Co Ltd, Cape Building Products Ltd, and Pilkington Bros Ltd, who sponsored the buildings for advertising and goodwill purposes, provided material for the artists to use in their public art works. The artists were chosen by Mr Crosby, except for the three painters in the west courtyard who were selected by the present writer at Mr Crosby's invitation.

The tower by John Ernest, **3**, between the exhibition building and the Thames, signalled the whereabouts of the congress to spectators across the river, as did the rows of flags, at the foot of the dreaded County Hall and the Shell building.

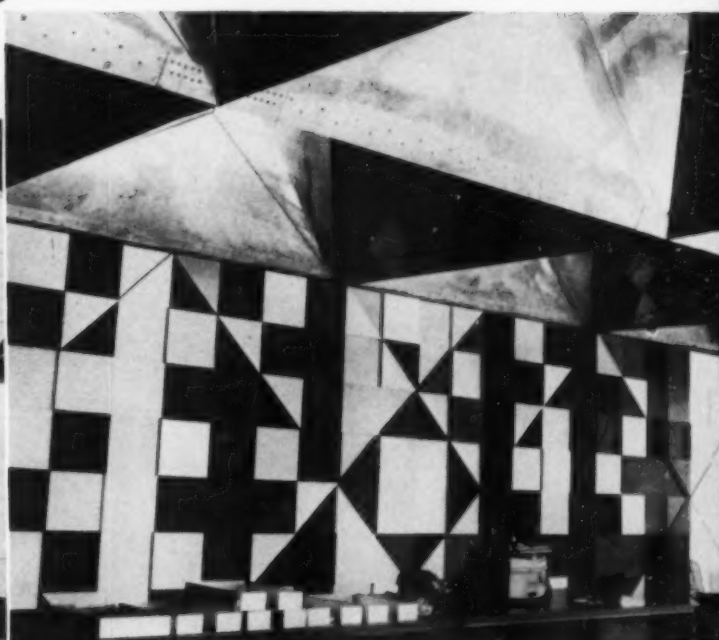
Not all the works were the result of synthesis or collaboration. Some were existing art works selected by Mr Crosby from stock and put down on sight lines, as vista terminals, or as axis pointers.

# OF TECHNOLOGY

## collaborate in congress exhibit



4



5

Anthony Caro's large red-lead painted metal sculpture, **4**, coupled handily the two buildings, being big enough and tough enough for this job. In fact, however, Mr Caro's work, large as it is, was intended by the artist to be seen close to in a small area. By stepping back, and by flowing easily around it, spectators could apprehend the whole too quickly. The piece worked architecturally, but at the expense of Mr Caro's artistic intentions. Such risks, slight to the architect, great to the artist, haunt the amalgamation of art with architecture.

Internally in the HQ building large reliefs by John Ernest, **5**, Anthony Hill, and Mary Martin, brought constructivist theories about the technical identity of art works and architecture to their biggest public test in England. The three artists accepted the module of the building and worked in some of the same

materials as the architect.

In the exhibition building two courtyards contained collaborative (ie specially done with standard industrial materials) and borrowed works of art. The east courtyard showed up the limitations of a *laissez faire* approach. Mr Crosby invited ill-assorted artists, none of whom bothered to consult one another; as a result, the courtyard is scrappy.

The walls of the west courtyard, however, were the result of cooperation, not only between the artists and the firm that made the Asbestolux panels (which were not intended for this type of painting), but among themselves. Left, looking into the cruelly paved area (dazzling white pebbles), was Peter Stroud's dark warm relief of reds, pinks and purples. Centred were the two-toned symmetrical panels of Bernard Cohen, **6**, shown here with

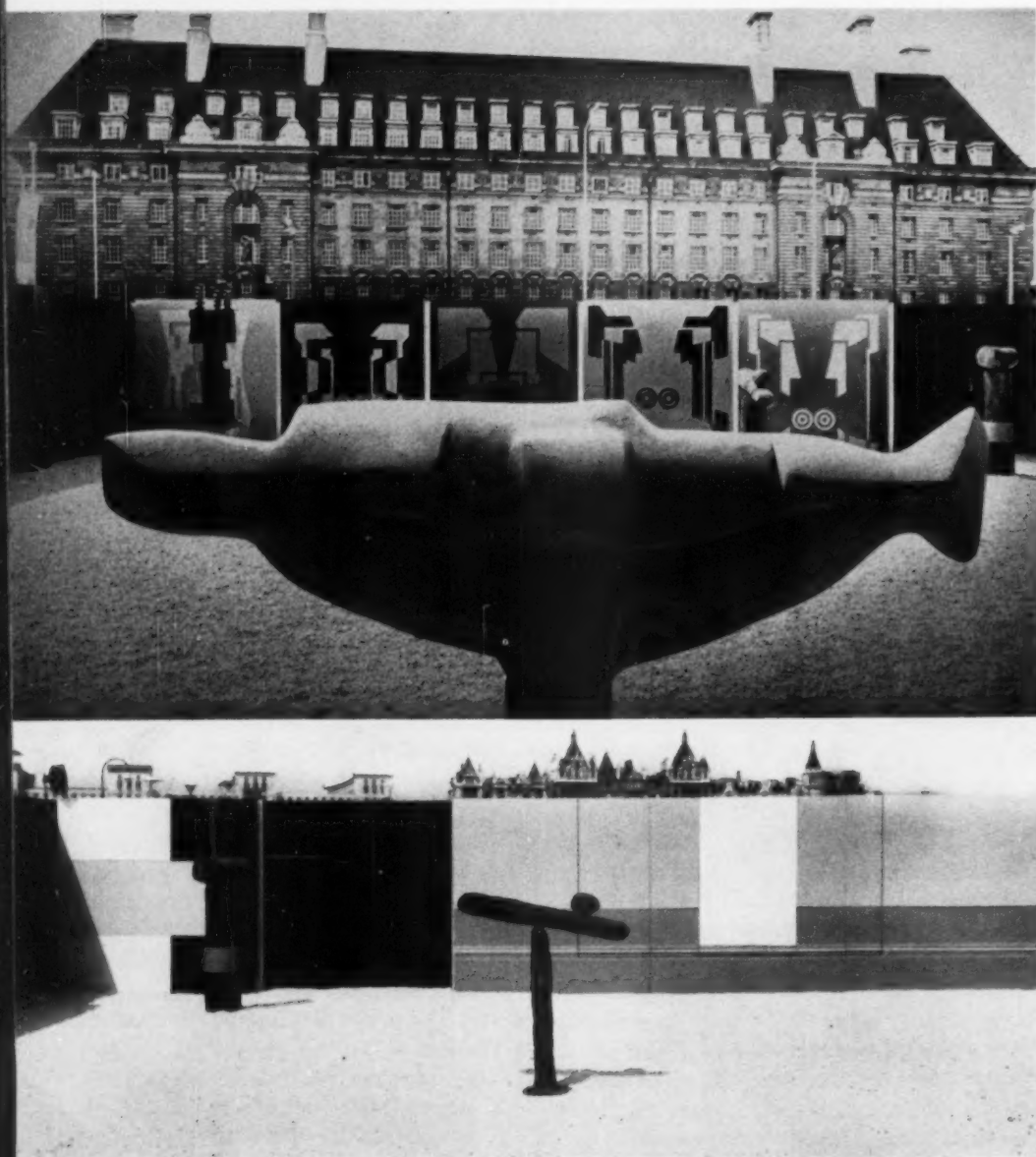


**Congress exhibit**

the sculpture by Mr Crosby in the foreground. The panels were endlessly subtle, and the result of prolonged mixing of colours by the painter. Right were two panels by John Plumb, in bright flat colours, seen here behind two sculptures by William Turnbull, 7. This area of the exhibition showed abstract art articulating the 48 ft square space with an heraldic splendour and power.

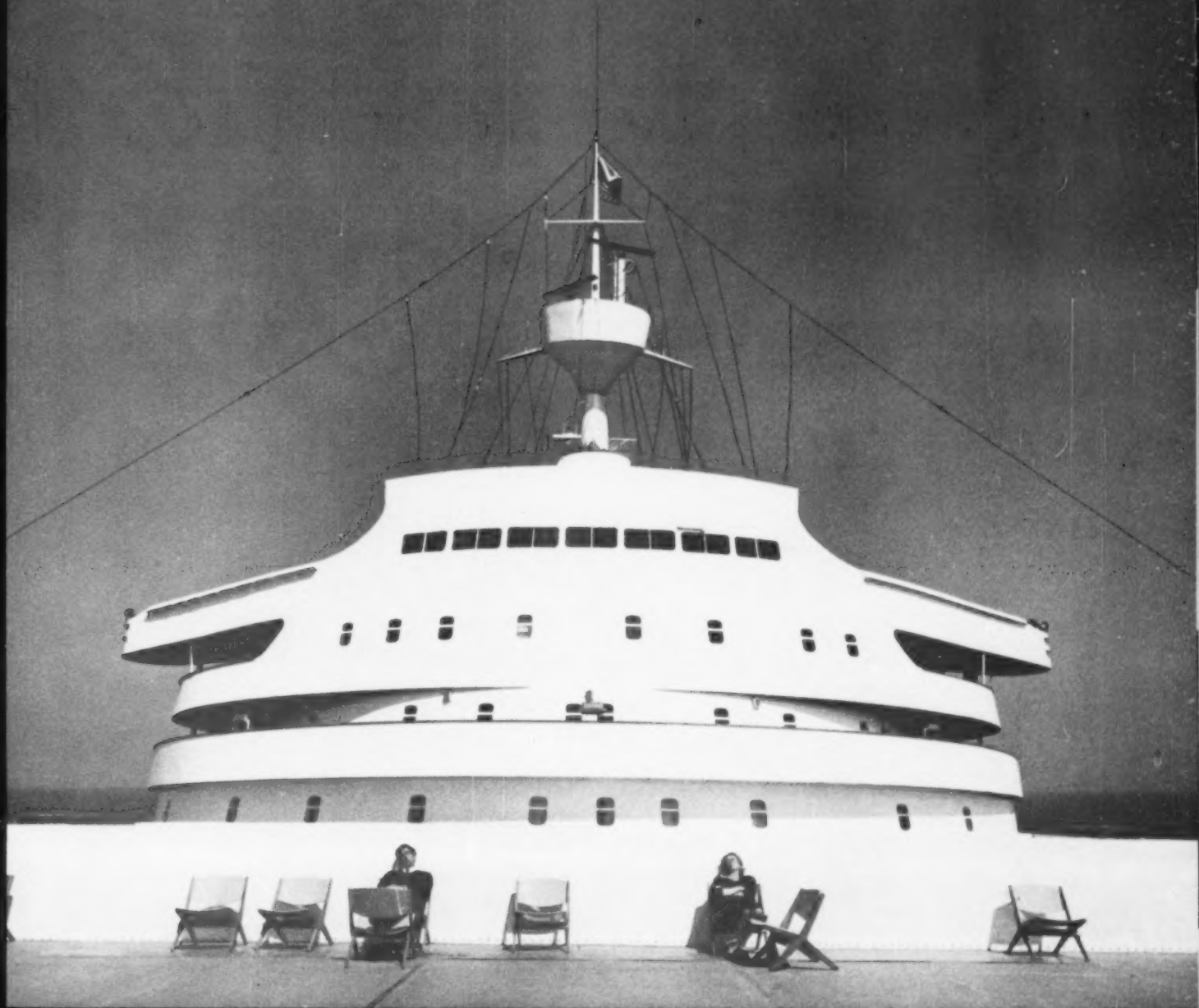
Opportunities to experience works of art in architectural settings are rare in England. In London the few efforts to build works of art into or onto buildings have been, at best, uninteresting and, usually, failures (Carlton Tower, Castrol House, Sanderson's building, Thorn House, etc). At the IUA buildings, however, there was at last a chance to see what happens when serious works of art are given a large designed area in which to exert their mysterious power on the imagination and spatial sense of the spectator.

*Photographs 2, 3, 4, 5 and 7 are by  
Robert Freeman; 1 and 6 are by  
Harriet Crouder*



# CANBERRA

"A complete work of architecture" . . . "a landmark in twentieth century naval architecture and design" . . . this is the author's assessment of Canberra, Britain's new passenger liner. Geoffrey Salmon describes the complexities of ship design, and the long term planning and enlightened collaboration which led to this achievement.



## CANBERRA

Ships have long been a source of inspiration to designers because of the rational assembly of elements and the direct expression of function evident in them. Indeed, Corbusier devoted a chapter to liners in *Vers une Architecture*, wherein he eulogised the "neat, clean, healthy" architecture of a ship, contrasted with the "dismal rooms" and "heavy tiled roofs" of our houses and seaside villas. This was written in 1927, yet in shipbuilding and fitting today, 'design' inevitably has two meanings. The first, of course, relates to the architecture of the ship itself – an applied design problem of structure, services and motive power more complex than anything most land based architects ever dream of. The second is the inevitably self conscious cosmetic treatment necessary within the interior of a ship to convert or disguise its metal carcase into a floating hotel, home from home, holiday camp, or what you will.

It is unfortunately true that the average person knows so little about the applied design of ships that he tends to criticise the interiors *per se*, rather than the complete work. Even an interior consultant normally feels reasonably assured that the naval architect must know what he is up to in making the gargantuan thing float and sail smoothly in the first place. Critics could, therefore, quite reasonably concentrate on giving an opinion on what atmosphere the public rooms should have, or how all the cabins should be fitted in, and be content to let the smoke go up a central funnel just the same.

And yet, is this good enough? Is it enough that the interior designer should take over at the place where the naval architect

*Photographs are by John Garner, except where otherwise credited*



*Photo P & O - Orient Line*

left off? What are these problems of co-ordination between interior design and naval architecture one hears about and what are the relative rights and wrongs of both sides? We have, on occasions, heard interior designers complain of an apparently empirical approach towards the structural design of a ship, leading to stanchions being added or duct work appearing in places where nothing was shown in the original drawings. Others stress the difficulties of controlling the quality of fitting out, the unaccustomed labour and trade union agreements, and the lack of the accepted contractual procedures. The designer's authority is not necessarily inviolate with the fitters, and sometimes he feels caught and frustrated in the machinations of naval architects, builders and owners. During the progress of design his original spatial and organisational concepts may be severely tried by the exigencies of ship structure, where heights, widths, lengths, weights are controlled in detail by the overall stability of the whole enormous moving structure.

#### Costs and collaboration

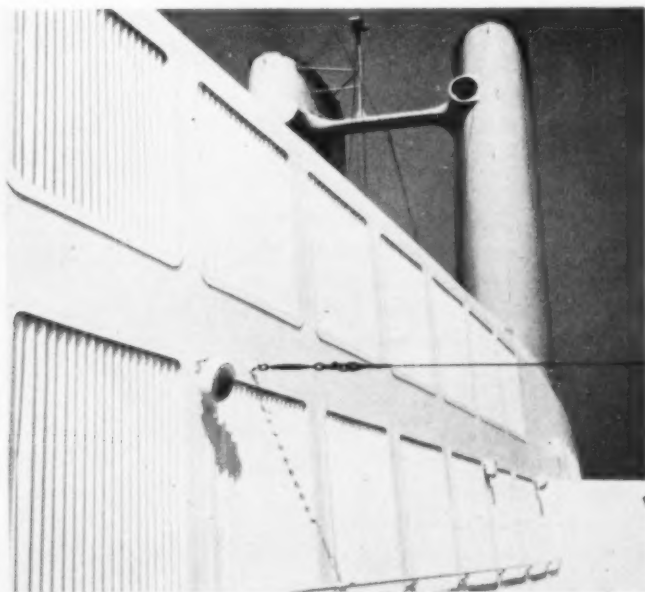
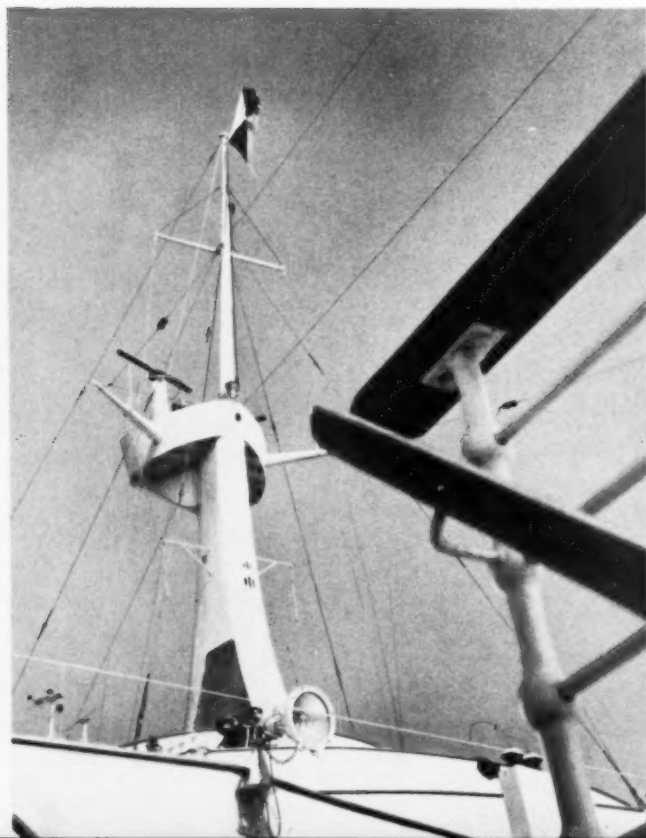
Consider now the owner's and naval architect's point of view. Each ocean going liner is a 'one off' job, produced by an industry which, by the very nature and scale of its undertaking, tends to rely upon the traditional trade relationships and well proven methods of ship building.

A new passenger liner may cost up to £30 million, of which the interior fitting out may take little more than £1 million. £30

million worth of floating metal is not thrown together lightly; the ship may take four years to build and the labour and material resources necessary at commencement are enormous. The comparatively limited life of a passenger liner and the vast capital involved means that there is little time for pre-planning the structure as in shore based buildings. Exact loadings cannot possibly be known at the outset so that structural adjustments during building are sometimes inevitable to take account of changes in superstructure loadings.

All the factors recounted here add up to one obvious answer to this delicate relationship between naval architect and interior designer: greater and earlier collaboration than generally exists at present is essential. This would not merely help to avoid misunderstanding, but would almost certainly result in a more unified design in every sense. We are fortunate, indeed, in being able to see the results of such an early and enlightened collaboration, when we look at P & O - Orient Lines' new passenger liner *Canberra* now on her maiden voyage.

Although the former P & O and the Orient Line companies have recently amalgamated, *Canberra* was commissioned as a separate enterprise before the merger. Thus this new ship is not by any means a continuation of the established design tradition of the Orient Line, but in fact marks P & O's first venture into collaboration with outside design consultants. This collaboration, begun at an unprecedented early stage of planning - before the keel was laid - has resulted in a fusion between naval architectural design



**Superstructure** Weight distribution studies carried out at an early stage of design planning led to the use of welded aluminium for the structure of the upper decks. Prominent elements of the superstructure, such as the bridge, funnels, masts and

ventilators were designed to serve their function and to give wind streaming and protection from wind and smoke for the passengers; but they were also carefully detailed to form a united architectural whole.



## CANBERRA

and interior design which permits us to discuss it as a complete work of architecture, comparable as an achievement, to say Gatwick Airport or Castrol House.

### The shape of the ship

The team responsible for the design were: John West, an assistant manager and naval architect to the P & O, who co-ordinated the entire work; Sir Hugh Casson and Timothy Rendle who, besides being consultant architects in association with McInnes-Gardner & Partners, were responsible in detail for all first class public rooms; John Wright who designed all tourist class public rooms, and Barbara Oakley who designed and decorated the cabin accommodation throughout.

The design of *Canberra* is based on the positioning of its engine room aft. Although this is common in tankers for safety reasons, and more recently in cargo ships, it is a relatively new departure in passenger liners. (The only other large passenger ships with this layout are Shaw Savill's *Southern Cross* (DESIGN 78/26-30), the recently launched *Northern Cross*, and Holland America's *Rotterdam*.)

This arrangement is in fact the key to many aspects of *Canberra's* appearance and use, and its effects were one of the first tasks that the design team tackled. Several models were made to examine the probable shapes and layouts of the superstructure, in which the main elements to be resolved were the huge twin funnels near the stern and the observation bridge and control centre high towards the bows. Later, wind tunnel tests were applied to measure wind resistance, the effect of wind upon the comfort of passengers on deck and to ensure quick dispersal of smoke away from the rear decks. But the resulting superstructure is clearly not only a result of wind streamlining but also of sensitive sculptural modelling on a grand scale.

From the point of view of planning, the positioning of the engine room aft permits full use of the central part of the ship for passenger accommodation and eliminates the intrinsic circulation problems which arise when the engine room is placed midships.

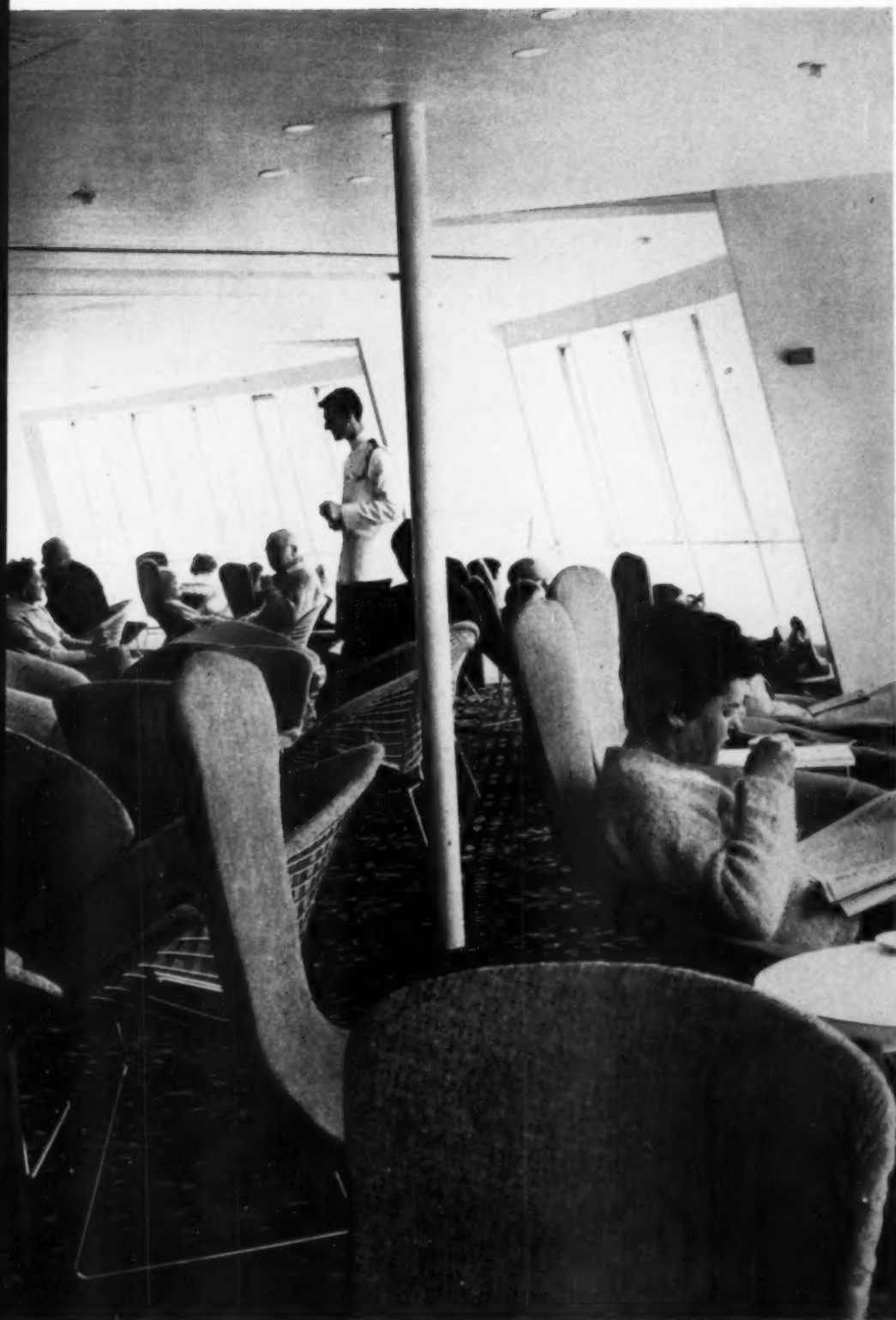
One interesting possibility which was considered in the early stages was the *horizontal* division of the ship between tourist and first class, but this idea was abandoned in favour of the normal vertical division which enables simple quick vertical circulation between cabins and public rooms. The public rooms in both classes gain enormously when they can stretch across the full width of the hull. Perhaps one of the most delightful things about this ship, is the contrast which one constantly experiences between sizes, shapes and extent of different public spaces. And this relative freedom in planning has been seized upon by the designers and exploited by means of fully glazed doors, large glazed panels and linked spaces which continue views from one room to others, from decks to interiors, so that one never feels hemmed in to a limited area.

Complementing this sense of space is a robust and positive use of solid sculptured form both in the superstructure, and in the interiors – particularly in the first class areas. Nowhere in this ship is this complete fusion of structural form and enclosed space felt

**Crow's Nest** A first class sea observation lounge; the spare grace of the Bertioia chairs combines well with the formality of Audrey Tanner's carpet. DESIGNER John Wright.



**Alice Springs** Here tourist emigrants can drink tea or beer overlooking the swimming pool. The whimsical swirling wall mosaics are by Arnold Machin; the basket furniture gives an invigorating, yet faintly spa-like atmosphere. DESIGNER John Wright.



**Pop Inn** This is an authentic Shaftesbury Avenue tourist teenagers' club with juke box, plastics strip on counters, and leopard skin upholstery; the 'pop' art boarded walls are by David Hockney. DESIGNER John Wright.

**Peacock Room** Here the vigorous use of pattern, colour and form is typical of Canberra's breakaway from the usual treatment of tourist public rooms. The chairs are used throughout tourist areas, and are made by cutting the chair form direct from a preformed 'drum' of plywood. This ingenious and economical idea has resulted in powerful, but sometimes ponderous forms. DESIGNER John Wright.



## CANBERRA



**First Class Restaurant** Both *Canberra's* restaurants span the ship from side to side near the water line, so are artificially lit. By day the first class restaurant simulates day lighting by illumination behind pinoleum side screens. DESIGNERS Sir Hugh Casson and Timothy Rendle.



Photo P & O - Orient Line



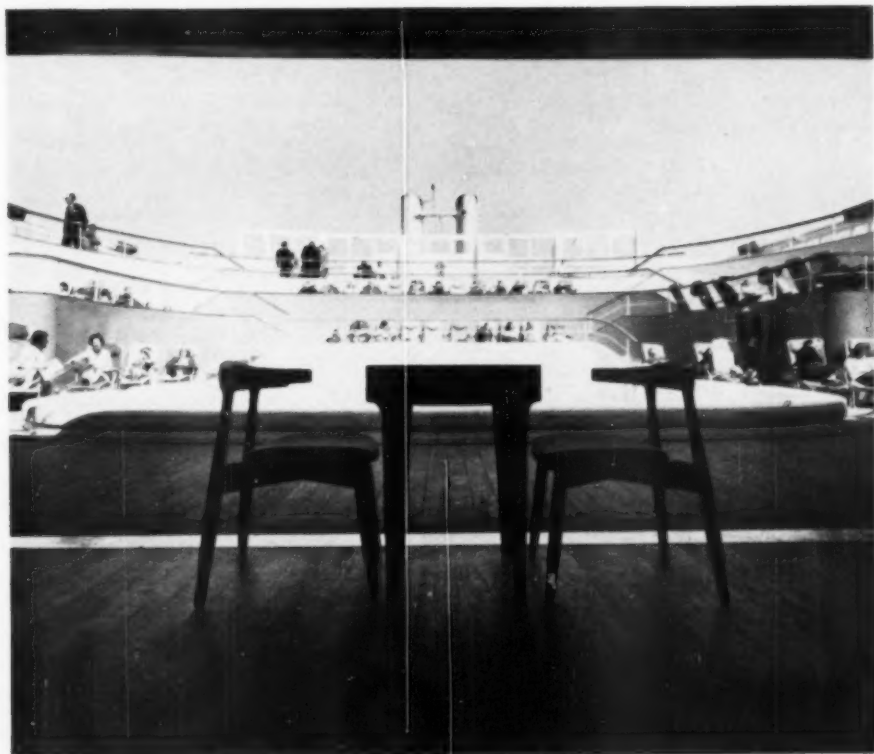
Photo P & O - Orient Line

**Cabins** All the first class cabins, TOP, are grouped round a 'court' corridor connecting to the side of the ship, so that they all have a view of the sea. Neat service installations and careful detailing in first and in tourist class cabins, BELOW, make the maximum use of available space. DESIGNER Barbara Oakley.

more strongly than in the first class games deck, where several decks encircle a swimming pool in gradually ascending contours, like a hill rising from a lake, terminated by the crest of the observation bridge surmounted by the radar mast which in shape and form would do justice to Reg Butler. A ballroom opens off the pool at terrace level, and is divided from it by a 30 ft wide vertical sliding glass door. Around the ballroom floor, smooth teak 'buffer' walls continue the enclosure of the pool and dance floor within the room. A shiny ceiling (giving diffused light by night) reflects the pool and terrace and gives height to the room.

And what of the 'atmosphere' of *Canberra*? Is it hotel, club or mansion house for the 2,000-odd passengers who will perhaps spend six weeks on her during their voyage from the cool Atlantic to the warm Indian and Pacific oceans? No one word can sum up the style of this ship, which is, above all, informal; no rooms heavy with pomp - ancient or modern - engulf or isolate the innocent

passenger; indeed a prodigious effort seems to have been made to enable normal people to live near normal lives while travelling 6,000 miles at 27½ knots between Southampton and Honolulu. For the tourist class this has led to decorations which have the same strong and immediate emotional impact that one might find in public houses, coffee bars, dance halls and restaurants ashore. In one or two rooms (the *William Fawcett Room* and *Pop Inn*) glitter and gaudiness are controlled but by a hairsbreadth; in others (the *Peacock Room* and *Alice Springs*) involved patterns and textures in mosaic, basketwork, lino and painted timber will add wit and fun to the adventure of emigration. In the first class areas, relaxed and subdued treatment of colours, materials, furniture and lighting in informal grouping produces different moods from room to room. Sometimes understatement has resulted in sobriety (as in the *Meridian Room*) but elsewhere such rooms as the restaurant, ballroom, and the *Crow's Nest* observation lounge have a self



**Bonito Club** The first class dance floor extends out onto the games deck by means of a 30 ft wide vertically sliding door; the treatment of this area is characteristic of the space 'stretching' used throughout the ship, particularly in first class interiors.  
DESIGNERS Sir Hugh Casson and Timothy Rendle.

**Swimming Pool Terrace** This terrace in the tourist area echoes the mosaic swirls of the Alice Springs room, which overlooks it.  
DESIGNER John Wright.



Glass fibre lifeboats are flush within the hull and nearer to the sea than the traditional arrangement. However, the relationship of aft funnels (one smoke, one air) with the superstructure seems incomplete, and is least satisfactory when seen from the rear.

assured international flavour as suitable in Naples as in Colombo.

There are many points of detail to be found on this ship which can be criticised, some severely. Chairs which ignore all the widely publicised data on ergonomics, handles and grip rails fit for claws rather than hands, lighting which glares, outbreaks of fussy patterns, epidemics of pure art. Seen against the total design, however, one must concede that these are relatively minor matters within a greater design achievement.

The management of P & O has shown itself fully aware of the value both to prestige and commerce of enlightened co-ordination with outside consultants at an early stage in the design of a ship. There is no question that, as a result, *Canberra* is a landmark in twentieth century naval architecture and design. With hints of a possible Government subsidy to assist in the construction of another large passenger liner for the North Atlantic it is to be hoped that the lesson will be noted.

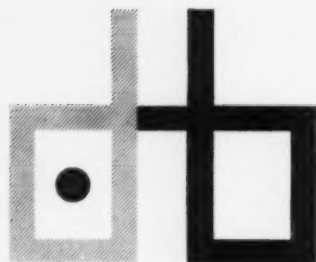
#### Credits

*Canberra* was built by Harland & Wolff Ltd for P & O-Orient Lines. **John West** assistant manager, P & O-Orient Management Ltd, was responsible for the overall design of the ship, and co-ordinator of construction. **Sir Hugh Casson** led the team of consultant designers, and with **Timothy Rendle** was in charge of the first class section; **John Wright** and his assistant **Frederick Hickman** were responsible for the tourist areas, and **Barbara Oakley** designed the cabins.



# BRISTOL STYLE

ALEC DAVIS



Since the Bristol Building Centre was established in 1957, and its offshoot Design Exhibition Bristol in 1958, these lively bodies have been steadily advocating good design in their part of England. And they have been practising what they preach – not only in good exhibition design but in their printed matter, the best of which stands to be judged by international rather than regional standards.

During the last year or so, the design policy has been carried a stage forward with the development of a house style in display and print. Its most conspicuous feature is an ingenious symbol, **LEFT**, which can be 'taken apart' to make two symbols, one for the centre and one for the exhibition, when these are dealt with separately. The parts consist of a formalised 'd' for design exhibition and 'b' for building centre, but the symbol is still a good one (or three good ones), and a valid means of visual identification, even if the letters are not immediately recognisable. Perhaps the most striking tribute to its value is a recent request from Bristol centre exhibitors that it should be made available as a stock block for use in their own publicity.

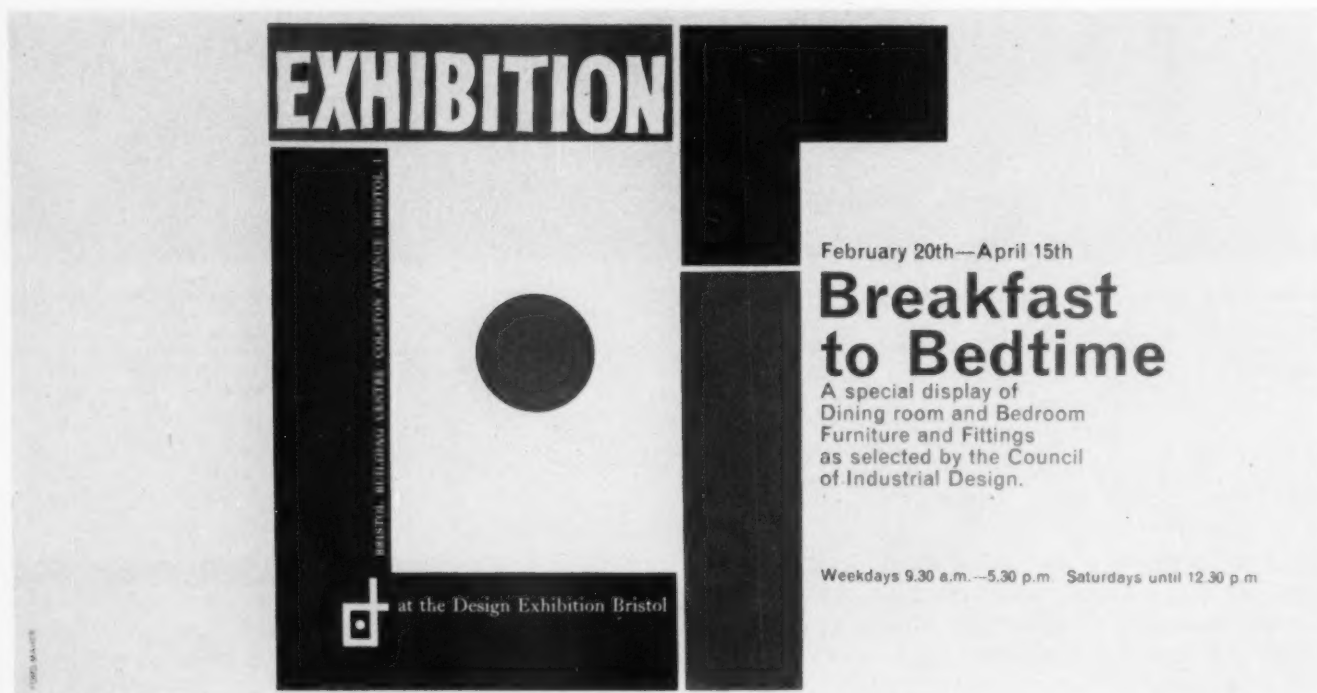
The symbol is supported by consistent use of a limited number of type-faces in all print – whether

produced by letterpress, litho, or screen process – for the centre and the exhibition. These include Grot 215, with Modern No 20 as a secondary display face, and Times Roman for longer text matter.

The choice of Modern No 20 could be criticised, since its thin strokes make it a difficult type-face to print well on small offset presses, which have been used for a good deal of the Bristol stationery: but this is a minor blemish in a forceful house style.

The items in which the style is evident have all been designed in Bristol by two young typographers, Tony Maher and Ron Ford (DESIGN 150/87), and also printed in Bristol. They are the special responsibility of the centre's publicity director, Brian Rushton, chief typographer in a Bristol advertising agency. They make up an extensive range, comprising a number of items of business stationery, posters, and other kinds of publicity material. Under this heading must be mentioned the *Bulletin*, in A5 size, which is sent regularly to some 2,000 West Country architects and builders.

A recent decision to standardise the international A sizes for Building Centre and Design Exhibition print wherever appropriate is in keeping with the progressive design policy of these organisations.

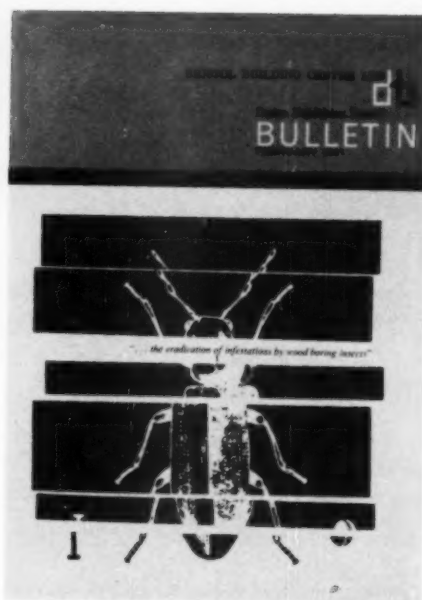


ABOVE A poster designed for exhibitions at the Bristol centre. The wording on the right is changed for each exhibition but the rest of the design is standard and considerable quantities can be printed in advance, thus reducing cost.  
RIGHT The letter heading.

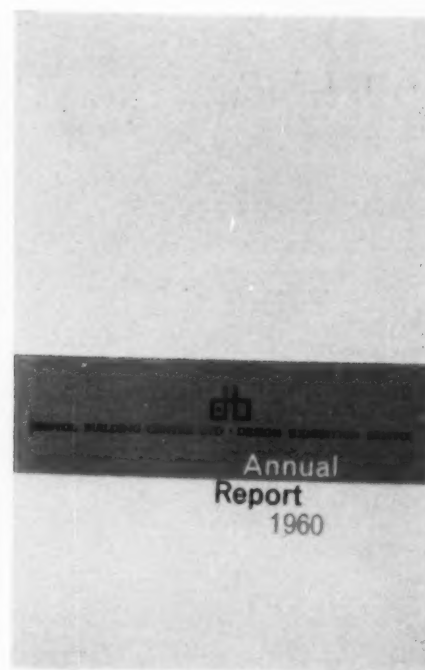
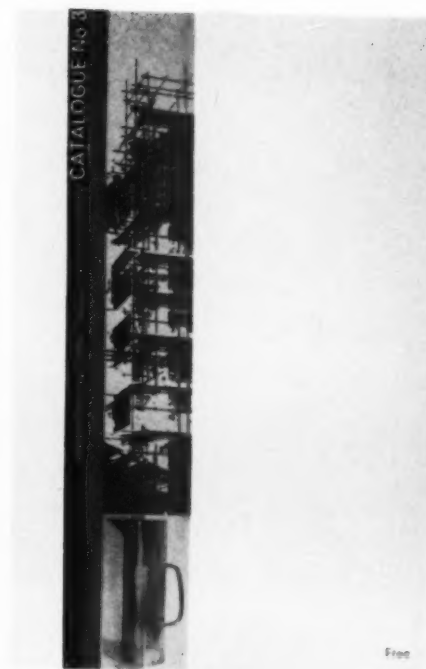
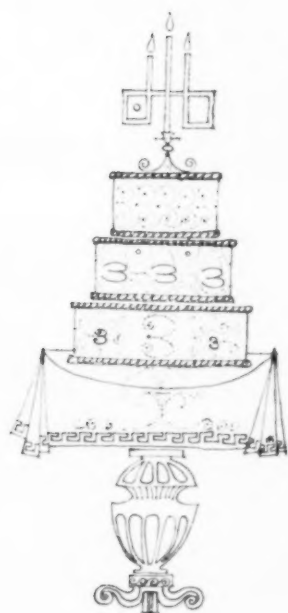


BRISTOL BUILDING CENTRE LTD

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Further examples of Bristol centre graphics are shown on this page. The illustrations on the bulletin covers, ABOVE, are always topical in relation to Building Centre or Design Exhibition events. The bulletins and the catalogue, RIGHT, were printed by J. W. Arrowsmith Ltd; The Mendip Press Ltd printed the annual report, FAR RIGHT, and Glovers Advertising Ltd is responsible for the stationery. BELOW The designers take their symbol seriously but not solemnly. Here it tops an imaginary birthday cake for the Bristol Building Centre's third anniversary.



# *modernising* **BT** *ritish* **Transport no.6**

ROBERT SPARK

**A report on the introduction of two  
new diesel locomotives and a coach**



At an exhibition staged by the British Transport Commission in London recently, several diesel locomotives and coaching vehicles were on view. The display was in connection with the fiftieth anniversary of the Institution of Locomotive Engineers. It provided an opportunity to examine and compare the latest diesel locomotive designs with earlier examples, a number of which were illustrated in an article last year (*Modernising British Transport No. 3*, DESIGN 137/34-40).

Two new locomotives displayed at the exhibition were both the responsibility of the same consultant designer. In one design, the *D9000 Deltic*, there was only an opportunity for superficial treatment, whereas the other, the *D7000*, was perhaps the most extensive exercise in body design yet accomplished on a diesel locomotive. The introduction of this latter design marks what might be termed as BR's second generation diesels. It is the most satisfactory design evolved so far and is a good example of what can

be achieved when there is close collaboration between industrial designer and manufacturer.

A diesel train coach for suburban service also shown for the first time is an example of the dilemma which still faces BTC's Design Panel. Because of the need to get these trains completed as quickly as possible only superficial improvements are possible. A second generation of coaching vehicles embodying more fundamental design concepts has yet to appear. Sir Brian Robertson, then chairman of the BTC, said in a lecture presented at the Institution of Locomotive Engineers: "I think we can claim justly that the Design Panel set up by the British Transport Commission has fully justified its existence, and that the appearance of our new locomotives and rolling stock gives witness to the effectiveness of its efforts." No one will quarrel with the first part of Sir Brian's comment, and happily the second part is also becoming valid and should be fully justified within the next year or so.



#### Passenger coach interior

The majority of coach interiors for main line and multiple unit trains now in production have received little or no attention from BTC's Design Panel because of the need to get the vehicles into service. New designs about to go into production and which will be coming into use later this year will more fully exhibit the effect of the panel's attentions.

The vehicle illustrated here, intended for suburban service out of Marylebone station, falls between these 'original' and 'greatly revised' categories. It has been superficially improved by the Design Panel within rigid limits enforced by production requirements. The seating is similar to that designed by Trevor Dannatt for the Southern Region's East Kent electric trains. The upholstery material is more attractive in appearance and colour than the usual moquette. There has been more imaginative use of colour in the laminated plastics panels. Luggage racks, lighting fittings, windows, doors and ashtrays are standard items which could not be altered on these trains.

Suburban rolling stock presents perhaps even more of a design problem than the luxury train because of the heavy duty it will undertake. These diesel coaches are a step in the right direction but the coaching stock appearing within the next 18 months must be awaited before a thorough evaluation can be made. REGION London Midland. BUILDER BR Derby. DESIGNER BTC Design Panel.

#### D7000

◀ This 1,700-hp diesel-hydraulic locomotive represents BR's new generation of diesel locomotives. Its design is probably the first example where a consultant designer was brought in early enough to have a marked effect on the result. Other designs which will be appearing in the future will bear a certain resemblance to the *D7000*. In appearance, it is by far the most successful of any of the diesel locomotives now in service, and indicates what can be done to overcome the unpleasantly restrictive features of BR's loading gauge.

The front end treatment satisfactorily meets operational and aesthetic requirements although the nose contour is a little too knife-edged; this could probably have been avoided if there had been time to make a mock-up. The lip above the buffers is an instance

of integrating functional and visual needs – it acts as a footway as well as partially shielding the maze of buffers, brake pipes and connectors. The fact that the designer was early on the scene has meant that he has been able to influence the locomotive's anatomy as well as the details. For example, the relatively flat roof over the cab reduces the tall and narrow look when viewed from the front.

When compared with other diesels on which this designer has collaborated, a continuation and refinement of a basic theme will be noticed. The superior overall appearance, scale and detail of the *D7000* results not only from greater experience, but from close study and co-operation with the builders. REGION Western. BUILDER Beyer Peacock (Hymek) Ltd. CONSULTANT DESIGNERS Wilkes & Ashmore.



Photo British Railways



#### D9000 Deltic

The prototype *Deltic* diesel-electric locomotive, top LEFT, which has an output of 3,300 hp, the largest of any British diesel, was built as a private venture by The English Electric Co. As such it represented the conventional approach to body design with a prominent nose at either end, the body merely a box to contain the diesel engines, generators and the mass of other equipment. Detailing was poor and the ornamentation reminiscent of the 'thirties.

When the BTC ordered 22 *Deltic* locomotives the intention was to evolve a fresh design with, in particular, a revised nose shape. However, the necessity for speed in production forced the abandonment of this project. The consultant designer was therefore left with the comparatively superficial task of attending to details and making minor improvements in the

overall appearance. The high massive nose has had to be retained, and cab windows, doors and grilles are virtually identical to those on the prototype.

In spite of this being a cleaning up operation, it is obvious that it has been worthwhile. The change from a slab side to one having a slight roll under along the lower portion of the body is a considerable improvement, and the production model looks better proportioned and more powerful than the prototype. The revised livery has also helped the improvement, although the broad, light coloured band at the base of the body is considered by BTC to be too bright. Future diesels (of other classes as well) will have this band in a more muted shade of green. REGION Eastern. BUILDER The English Electric Co Ltd. CONSULTANT DESIGNERS Wilkes & Ashmore.

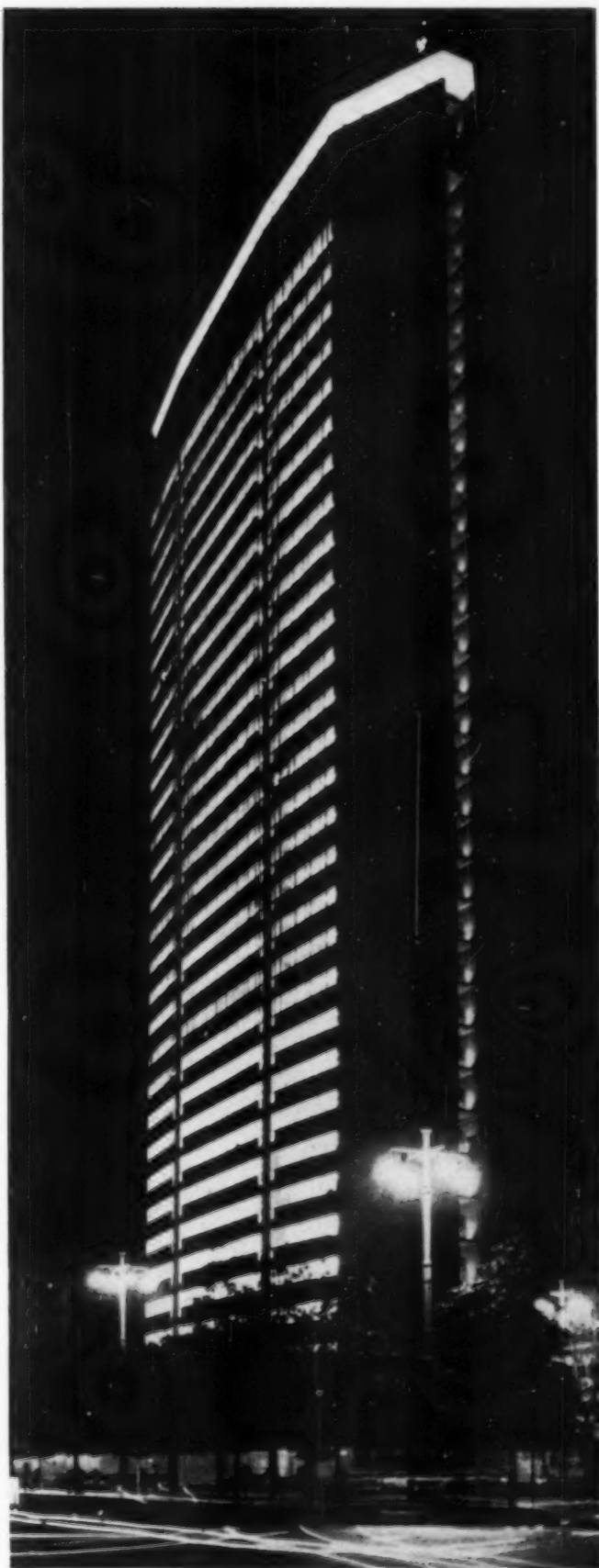
*All photographs are by Sam Lambert except where otherwise credited*

# LOOKING UP TO PIRELLI

Overseas  
review  
Italy



The breathtaking elegance of the Centro Pirelli in Milan is already legendary among professionals and laymen alike. This slim tower with its tapering finite forms is the most dramatic and most memorable of all post-war European commercial palaces. It is thus the most effective – and perhaps the most expensive – form of publicity that the Pirelli organisation could have devised; it may even in some circles have distracted attention from the real concerns of the company, the name Pirelli being now thought of first as an office building and second as a pioneer in rubber. But it is as an office that it must also be judged – not simply as a noble architectural achievement, but as a day-time headquarters for a population equivalent to that of a small town, demanding three separate but linked electric power stations; 250 tons of water per hour for its air conditioning; a dozen lifts that travel at 30 feet per second; an internal automatic postal system that will handle over 12,000 letters and packages a day; and all the other innumerable comforts and services that the good employer must now provide. And it is





2

as an office building that the Pirelli tower seems really to triumph – at least to one superficial observer who had the advantage of a conducted tour by the architect.

This success stems from a universally apparent, painstaking attention to detail. It seems almost as if nothing had been bought off the peg for this building, but that everything down to the coat hooks in the cloakrooms had been specially designed. And yet one knows of other office buildings for which almost everything has been specially designed, in which each and every office has been given affectionate attention but which offer no such sense of achievement. What distinguishes the Centro Pirelli from many a modern interior exercise is its calm coherence, its modesty and one might almost say its classlessness, for the repetition in so many offices of so many sensible finishes and surfaces and furnishings renders redundant and somehow rather old fashioned such conventional status symbols as separate colour schemes for each director. Here, in this giant prestige symbol, there seems to be little room for individual, personal prestige, not even if your name is Pirelli. And that too, like the close attention to the detailing of the humblest faucet, is typical of this great business machine. P.R.





- 1** The entrance hall is 80 ft wide. At night, lighting emphasises the reinforced ceiling trusses. The floor, as elsewhere, is covered in Pirelli rubber.
- 2** The same restrained themes are continued, with small variants, throughout the offices. Here, in a manager's office, high above the roof tops of Milan, the continuation of glass to the floor is spectacular.
- 3** At ground level there is an auditorium seating 600. It is equipped with both a stage and cinematographic equipment. Velvet curtains backstage can be drawn aside (as shown here) revealing the continuity of the ceiling structure of the next hall. All metal finishes are in aluminium and stainless steel.
- 4** No details were too small to escape the designers' attention.





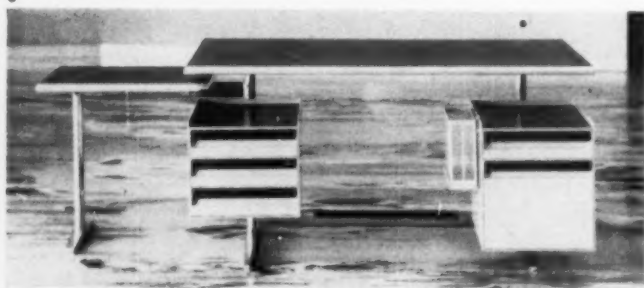
5 There are two types of chair used in the general offices, swivel and fixed (illustrated here). DESIGNER *Alberto Rosselli*. MAKER *Arflex*.

6, 7 and 8 Office desks have been designed around a few basic elements to cater for the diverse needs of clerks and senior staff. On the clerk's version there is a lower height of working top for a typewriter which can be mounted either left, 6, or right, 8, with a choice of positions for the drawers and small cabinets. Note the neat waste paper basket, 6, which can be hung wherever is convenient on the underslung desk drawers. The desk for senior staff, 7, has the same frame but with a larger working top, 33 x 74 inches as opposed to 29 x 58 inches. There is also a difference in the desk-top finish: natural wood for senior staff, linoleum for clerks. Desks, drawers and cabinets are demountable for ease of transport and storage. DESIGNER *Alberto Rosselli*. MAKER *RIMA*.

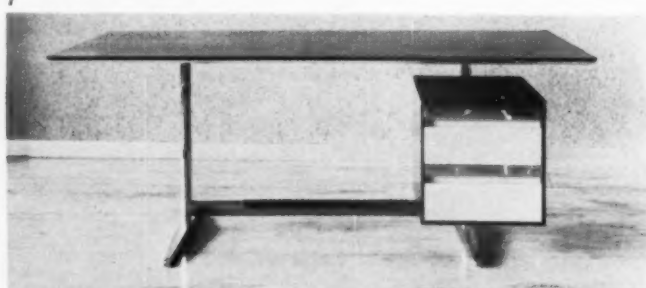
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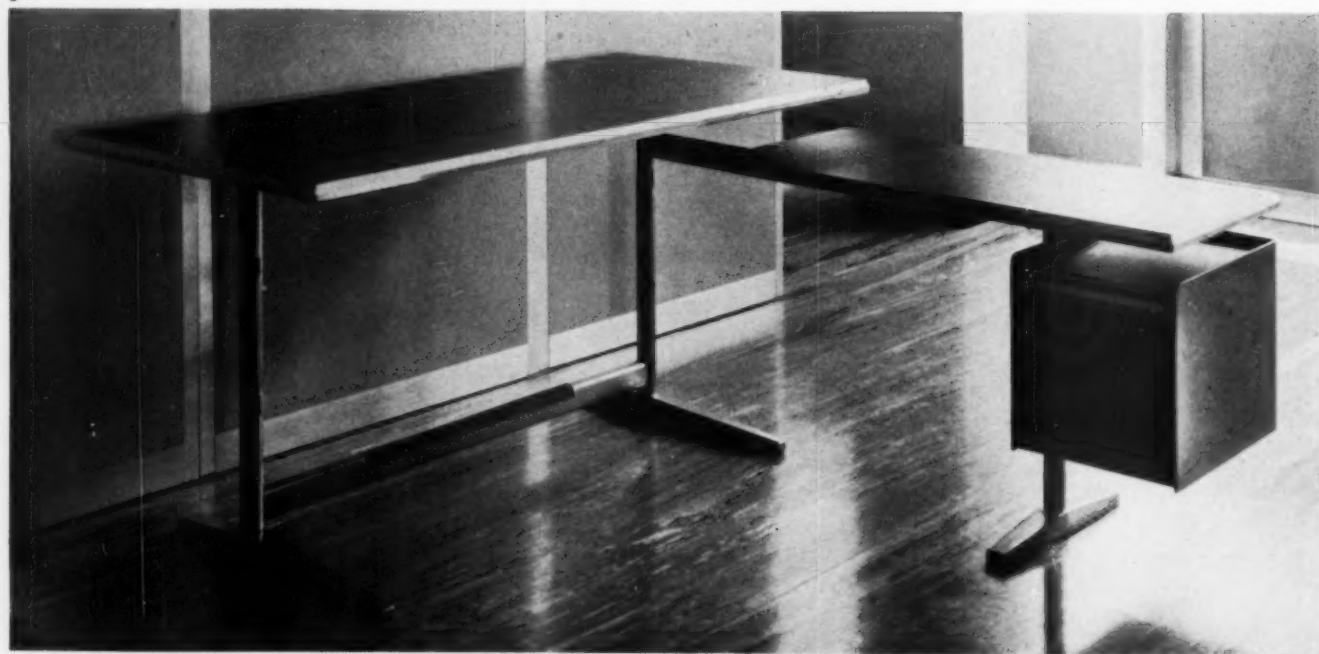
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#### Credits

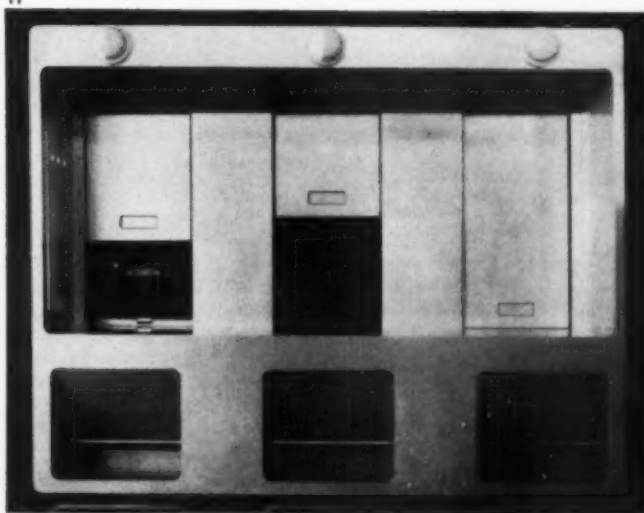
The building was designed by architects Gio Ponti, Giuseppe Fornaroli and Alberto Rosselli together with civil engineers Giuseppe Valtolina and Egidio Dell'Orto. Pierluigi Nervi and Arturo Danusso acted as consultants for the structural calculations.

9 A view down one of the Pirelli press offices. Furniture is arranged according to a modular plan, with filing cabinets aligned along the sides of the room. Some offices have movable partitions so that the layout can be easily changed.

10



11



10 and 11 A brief description of the postal system serves to emphasise the detailed thought which has gone into the design of the building. To handle the 12,000 or so letters, packages, telegrams and circulars each day, a large number of messengers would have been required. Their movements would have created a considerable traffic on the inter-floor lift system. Instead of messengers, an automatic postal system incorporating three small lifts and Plexiglass letter shoots has been installed, inter-connecting the 30 floors.

# REPORTS



## Audrey Withers reports on the British show in Moscow

With most trade fairs, an article published three months after the closing date would be in the nature of a *post mortem*. The cheerful thing about the recent *British Trade Fair* in Moscow is that, though officially closed on July 4, it is still alive and kicking – in the form, not only of orders to be executed, but of continuing negotiations sparked off by Moscow contacts.

It is true that the Soviet Union has a permanent trade delegation over here to buy on its government's behalf; but there is magic in the moment when a top buyer and a product come face to face, and he says, "Just what we need!", and a deal is done. In Moscow, representatives of all the chief government buying agencies – as well as thousands of influential directors of regional economic councils, factory managers and technicians from all over the Soviet Union – came face to face with the products of 725 firms: so that over £10 million worth of orders were placed during the fair itself, and a large number of further negotiations are still going on.

One day manufacturers may universally possess high design standards in their products and presentation, and in that happy age to visit a trade fair will be an aesthetic delight. It cannot be pretended that this is so now – whether at Moscow or elsewhere. Some individual stands were very good looking and clearly informative. The two main textile stands, of wool and cotton, were each outstanding. The National Wool Textile Corporation stand was very

handsome, traditional in the way expected of it abroad: several enquirers demanded serge (shades of British nannies?), which has not been manufactured for years; and all were overcome by the wonderful quality of the woollens. In fact, Soviet buying (to the tune of £325,000) laid emphasis on quality rather than price and, sadly, was entirely in the men's ranges: surprising discrimination from a country which really practises sex equality.

The Cotton Board gave an imaginative display of the prettiest pick of Lancashire cottons. These won special admiration for their varied finishes, and for their lovely colour sense: though one comment, on a tawny-orange group, was, "Do women in England really wear such colours? We thought they must be meant for export to oriental countries". Actual trading prospects seem brightest in the novelty ranges such as printed velvets, flock prints, brocades, and colour woven cottons, as straightforward cotton prints are a very big Soviet industry already.

Of course there were some magnificent engineering and chemical industry displays: notably ICI, AEI, Vickers and QVF (those glass retorts and tubes made a beautiful abstract composition).

The toy stands were always jammed with children, who looked as if they could have stared all day at the moving Meccano display, the Hornby trains, and the Pelham Puppet show. By now, £8,000 worth of Bendy toys have been shown – and probably

1 The Cotton Board's display drew wistful looks.

2 and 3 Two of the exhibition's four pavilions: 2 shows one of two halls specially designed by Jack Howe & Partners, with Andrew Bain; 3, an earlier hall.

sold – at *Dyetski Mir* (Children's World), the huge Moscow store, and Newfeld Ltd expects double the order, later this summer. Meccano Ltd and Lesney Products & Co Ltd (both makers of miniature cars, tractors and so on) also got good orders.

Some firms who had previously done well did even better: Astraka, whose nylon fur coats are already firm favourites, secured a further minimum order of £50,000. Others who had traded previously, but only at narrow profit margins, got reasonable prices and felt hopeful of maintaining them.

But the fair deliberately concentrated on capital goods as the likeliest to draw roubles, and there have been excellent orders placed for heavy electrical and mechanical engineering machinery, and for complete chemical plants. Technical staff on the stands were vastly impressed with the knowledge displayed by their professional Soviet visitors – and astonished at the level of technical questions fired at them by the ordinary public. No single stand-holder I spoke to regretted the decision to exhibit.

It was interesting to hear the comment of Mr Marlow of Baker Perkins (one of the companies in the Associated British Laundry Engineers stand,



who sold its entire laundry exhibit at the fair); he said, "The reception given to us by laundry engineers and administrators here has floored us all. They have influenced *Raznoexport* quite as much as we have done." It is often felt that Soviet buying operates uninfluenced by outside opinion; but in fact the views of people in the industry concerned carry, very sensibly, much weight. Even the general public exerts influence indirectly; for any government is concerned that its people shall be happy and satisfied, and only holds back in the interests of what are felt to be more fundamental needs. Now that the Soviet economic situation has eased so much, the government is more able to listen to the voice of its people - 1½ million of whom visited the *British Trade Fair*, and voted it tops.

## Standard for lighting

The recently published IES code\* is a document of interest not only to the practising lighting engineer but also to architects, designers, and in fact everybody concerned with seeing, and with natural or artificial lighting.

Two features distinguish the new code from its widely accepted predecessor published in 1955: the recommendations for higher lighting levels for many visual tasks, and the insistence on quality.

There are no 'absolute' correct lighting levels, and any code must bear in mind economic considerations. The new code provides for approximately 50 per cent increases in illumination values for many purposes which, in view of increased efficiencies and lower costs of modern light sources, means little, if any, change in the cost of lighting compared with five years ago. The recommendations are substantially below those of the American IES. An important innovation, however, is the acceptance of the minimum 'amenity' level of illumination of 15-lm/ft<sup>2</sup> for any area such as corridors, so as to avoid the potentially dangerous contrast between working and non-working areas.

Perhaps even more important is the emphasis on quality in the new code, with useful recommendations on colour, revealing form and texture, and controlling glare. Working teams of engineers studied many installations and employed computers for carrying out many thousands of calculations for the correct light distribution required for rooms of various shapes and sizes. Thus a 'limiting glare index' was established for different visual tasks. An installation complying with this recommendation is likely to be comfortable, whereas one outside it may cause eye strain to the occupants.

### WHAT IT MEANS

Only lighting engineers need familiarise themselves with the novel techniques of designing installations to comply with the code, but all concerned with using lighting must face its implications. First of all, the simple bare tube batten fitting is unacceptable except in the smallest offices or where the tubes can be concealed by other means. Diffusers and louvres, some of a simple clip-on kind, are available to transform such existing installations at very low cost.

In a large room with several fittings in use, the choice of the correct type of fitting is even more important. For example, the Perspex diffuser, so popular in recent years, may give rise to glare and there should be a trend towards fittings with opaque sides and louvred base to give a more concentrated lighting distribution. This, in turn, would necessitate closer spacing of the fittings where reasonable uniformity of lighting is called for.

It has been customary in the past for architects and builders to specify the electrical installation of a building and to provide for lighting points in a general way, but this will not be good enough in future. Early consultation with the lighting engineer and a firm decision on a lighting scheme, however, can ensure that the interior will really comply with modern standards of comfort and efficiency.

## Building research

A new laboratory for research on materials has recently been opened at the Building Research Station. This a valuable addition to the station, for it is vitally necessary that its work of independent research and assessment keeps up with the rapid development of new techniques and materials, if designing is not to be inspired guesswork. For example, very little is known of the ageing potentiality of many of these materials and on some it is not yet possible to carry out accelerated tests. But if factory industrialisation of materials and the handling of them is to be a boon rather than a curse to the designer it will depend on the scientific accuracy of material knowledge. From this point of view the value of the work of F. M. Lea, the director, and his team at the BRS is obvious.

Exposure tests are being made on the crazing of plastics roof lighting sheets and the discolouring of plastics guttering and down pipes. (Already some colours, often those most discernible to the eye, are proving to be unstable.) At the same time experiments are being carried out to examine the potentials of new plastics with good thermal stability for use in hot water systems.

The research into colour which led to the publication of BS 2660 (DESIGN 123/34-40) is being continued, for the number of mass-produced colours is still very large and unco-ordinated. These are being reduced in relation to functional requirements and systematically co-ordinated for the needs of other building products. Certain building components are also being co-ordinated in preferred and related sizes for it has been demonstrated, both here and in tests abroad, that limited ranges of components need not affect flexibility in design. Techniques are being developed to test user needs, economics and costings. The costings of natural materials are often traditional, yet more detailed costings of them in relation to new materials might well give a welcome surprise.

Considerable work is being done on prefabrication, precast concrete panel joints, and waterproof mastics for curtain walling. So often brilliant ideas are followed by teething troubles, some very serious. Parallel experiments are being made on building techniques - the handling of materials by crane, package delivery of panels and bricks, and the direct placing of ready mixed concrete.

But the weak link in the chain remains the inadequate communication of information - the problem of absorbing knowledge of new materials and integrating it with consumer needs and a reasonable standard of design. Perhaps new materials should be introduced more gradually, rather than wholesale, so that the architect or designer can use them properly and not as an imitation of something else, like the fake plastic slate tiles I saw. But if the BRS is right in seeing the architect and designer as a co-ordinator, then it is doing a great deal to help him.

CORIN HUGHES-STANTON

## Selling by machine

The sales of coin operated vending machines are increasing. There were 42,000 machines in 1947; today over 200,000 are making sales worth £20 million a year, and it is estimated that by 1980 these sales will be worth over £1,000 million. The machines are becoming larger, and are spreading from the factory floor to the seaside, from the forecourts of shops to stations, clubs and offices. Where there were once single cold drink machines there are now machines selling hot drinks, snacks, pre-heated hot meals, groceries, stockings and books. Visually they dominate everything around them. That they should be well designed is therefore of the greatest importance. While the problem gave concern a few years ago, it is doubly serious today, for, with rare exceptions, no real attempt has been made to think out the vending machine as a visually satisfying design.

Most machines are still American or European designed, imported or built here under licence. For the consumer, mechanical advances are considerable; the new machines are easier to handle, have better placed controls, take several sizes of coins in one slot, and offer a wider choice of merchandise.

However, this has not been accompanied by any visual advance. Manufacturers are still mainly concerned with sales appeal, which in spite of indifference can be equated with good external as well as good internal design. While resistance to vended drinks has been overcome, the main problem is to convince us that groceries and products sold from automatic machines are as good as the equivalent from a shop. Yet in spite of the need for machines to reflect the quality of the product being sold, few firms have started from this point of view.

Instead of being organic, the visual appearance is still borrowed, usually from the juke box. As long as the vending machine is made to look like something else it will be difficult to design well. The result often is an ill-conceived riot of chrome, clashing colours and ugly point-of-sale signs. Rarely is the lettering of the name plate or instructions good; the casing is often unnecessarily bulbous, sometimes 'streamlined' to appear modern, and the detailing is bad.

Pleasingly, where a better design policy has been introduced, the machine is British designed and manufactured. Taking the industry as a whole these are exceptions. Cannot we hope that qualified designers and design schools, from the outside as it were, will tackle the basic design problem and show what can be done? Only then will we have a comparative design yardstick with which to work.

CORIN HUGHES-STANTON

\* *Recommendations for Good Interior Lighting*, Illuminating Engineering Society, 32 Victoria Street, London SW1, 12s 6d.





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# MISCELLANY



## New college of art

Portsmouth has had an art school since 1870. Even before the war plans were considered for a new building, but it was 1951 before approval was given by the city council for two acres in the centre of the city, to be allocated to the proposed new college. It was not until 1956 that the Ministry of Education approval was given to the schedule of accommodation and sketch plans. When tenders were received in 1958 the ministry insisted upon reductions, leading to agreement on a final building cost of £181,590. The building was completed in time for the college to open for teaching in September last year. These dates are of interest in showing the wearisome delay attendant on a scheme of this kind.

The architect for the building is F. Mellor, with P. J. Leary as assistant architect. The schedule of accommodation required was drawn up by the present principal of the college, W. J. L. Gaydon. The school includes departments of architecture, fine art, printing, graphic display and dress design.

The building is set round a courtyard. To the north side is a four storey block in reinforced concrete, housing the main entrance and library, with three floors of teaching studios above. Off the entrance lobby is an exhibition space which can also be used for lectures or films. To the west is a two storey wing containing administration and common rooms (staff and students). To the south is a single storey wing for 'dirty' crafts (sculpture, pottery), which is at present in part use for engraving and display work. To the east the square has been left open – but this will soon be enclosed by a two storey wing which, together with further studios to be set away to the south, forms the second phase of the building work.

In compiling his scheme of accommodation, and in subsequent discussion with the architects, Mr Gaydon had certain overriding considerations in

mind: (a) the student studios should be placed so that marauding public could not 'drift' through; (b) it was essential to have exhibition space where work from all the departments could be shown and seen by all students and so break down departmental barriers; (c) the importance of having a courtyard, away from public view, where students could sit and attend outdoor classes; (d) good library accommodation; (e) the segregation of 'dirty' crafts from clean subjects; (f) good lighting to all studios. These requirements have been fulfilled.

## Sliding up the wall

A new pre-fabricated paint film, *Slidex*, made by Paint Fabrication Ltd of Dorking, presents an ingeniously simple method of decorating surfaces.

It consists of a number of coats of paint, in either two tone pastel shades or a small variety of patterns, which are mounted on a backing sheet. The sheets are dipped briefly in water, and the paint film can then be slid off its backing onto the surface to be decorated. It is claimed that *Slidex* can be applied to a wide variety of surfaces, and is very easily cleaned.

The cost of *Slidex* is comparable with three coat paintwork; and the general intention is that this quality of surface will be available to the house decorator in a way which is easier of application and obtainable in smaller quantities than wallpaper.

In view of the originality of the technique, it seems a pity that the designs which are at present in production are not more interesting. Despite the fact that for the first set of patterns two experienced textile designers – John Wright and Brigitta Dehnert – were called in, unimaginative wallpaper and tile effects predominate, and the possibilities for unusual pattern making effects have still to be explored.



But the real test of an art school is the quality of work produced. Will better work be produced in modern studios, fully equipped, with ample space and ideal lighting – rather than in the foggy, snug, unhygienic quarters that the college had before? Clearly the genius will surmount any difficulty, and the inspired teacher will overcome anything. But there is no benefit in *having* to do so. At Portsmouth the average student has a better chance and is prepared for working in an efficient office by the admirable conditions.

STEPHEN GARRETT



The new 'Aristocrat' desk telephone pays eloquent tribute to the excellence of Styron\* polystyrene. Functional design, clean, smooth contours, subtle colours, delightful finish . . . all the Styron features are combined with Styron toughness in this elegant and efficient instrument. Add the renowned technical service of the Distillers Plastics Group and you have the reasons why more and more designers and manufacturers are calling for Styron. To find out more about this versatile material simply pick up YOUR telephone or write for Booklet No. 236.



# STYRON

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Aristocrat 'FL-50' telephones are manufactured by Autophone Ltd, 73 Great Peter Street, London SW1 with bodies and handsets moulded in Styron 475 polystyrene.

*\*Styron is a trade mark of the Dow Chemical Company USA*

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*Distillers Plastics Serve Everyman*

236

# NEWS



Stefan Buzas (see *Royal Designers*)



Audrey Withers (see *Bicentenary Medal*)



Jack Howe (see *Royal Designers*)

## Royal designers

The council of the Royal Society of Arts has recently made three new appointments to the distinction of Royal Designer for Industry. These are Stefan Buzas, for exhibitions and interior design; Jack Howe, for engineering products and industrial equipment; and Marcello Nizzoli, the Italian designer, who is appointed an honorary RDI for his work on typewriters and calculating machines.

Mr Buzas is a partner in the architectural firm of James Cubitt & Partners. He designed the South Africa travel bureau in Piccadilly, and the weather window in London's *Time & Life* building. He also designed the CoID's stand at the 1960 *Furniture Exhibition* (DESIGN 135/59).

Mr Howe, who is a member of the CoID's 'Design Index' committee and Street Furniture Panel, is a design consultant to the British Transport Commission. The council of the RSA stresses his influence "through major commissions undertaken for a number of leading manufacturers" on a wide range of engineering products and electrical equipment.

Mr Nizzoli has worked for the Olivetti company since 1940, and as well as designing many of its products has also had a part in its factories, housing estates, offices and advertising, both in Italy and in Olivetti's overseas branches.

## RSA honours Gropius

The *Albert Medal* of the Royal Society of Arts has this year been awarded to Walter Gropius, "for his contributions to architectural and industrial design". Professor Gropius may come to this country later in the year to receive the medal.

## Bicentenary medal

The council of the Royal Society of Arts has awarded its *Bicentenary Medal* for 1961 to Audrey Withers. Miss Withers, who joined the staff of *Vogue* in 1931, was appointed editor nine years later and held that position until her retirement last year. From 1948-1953 she was a member of Council, CoID, and served on the first panel of judges for the first award of the Duke of Edinburgh's *Prize for Elegant Design*, in 1959. She served on the women's fashion jury of the RSA's *Competition for Industrial Art Bursaries* from

1954-1958, and was elected a fellow of the society in 1953, in which year she was also awarded the OBE for her work as chairman of the CoID Coronation Souvenir Committee.

The *Bicentenary Medal* is awarded annually "to the person who in a manner other than as an industrial designer has exerted an exceptional influence in promoting art and design in British industry".

## Travel grant

Neville Conder, architect and industrial designer, has recently been awarded a Ford Foundation - English-Speaking Union travel grant for 1961-62. He will go to the United States to study the problems involved in the size and expansion of universities, both in their architectural repercussions and in a wider context.

## William Roberts

DESIGN announces with regret the death of William Roberts, its advertisement representative since 1957. S. J. Enright, who joined the CoID recently from Newman Books Ltd, will now be responsible for advertisements in DESIGN and other CoID publications.

## COMPETITIONS

### Newspaper design

The 1961 *Award for Newspaper Design* again offers certificates for the best entries in three classes (daily and Sunday newspapers, evening newspapers published six times a week, and newspapers published once, twice or three times a week), and a bronze plaque for the best designed newspaper of the year. Entries will be judged in terms of design for purpose, and will take into account the general appearance of each page, the disposition and emphasis of headlines, the use of illustrations, choice of type sizes, treatment of captions and legibility. The judges are William Redpath, honorary librarian of the Press Club; James Shand, director of the Shenvall Press; and Lord Birkett. The award is administered by a committee comprising representatives of the Newspaper Society, the British Federation of Master Printers, the CoID, Linotype & Machinery Ltd, and *Printing World*.

Any issue published from July 1-14 (both dates

inclusive) is eligible for the award, and the closing date for the receipt of entries is September 11. Full details are available from *The Annual Award for Newspaper Design*, *Printing World*, 296 High Holborn, London WC1.

## Society patronage

Prizes for this year's Royal Society of Arts *Industrial Art Bursaries* competition amount to a record total of £5,875. The competition is open to students and young designers who intend to take up industrial design as a career. Awards are offered in 19 fields of industrial design, ranging from flat glass decoration and women's fashion wear to laminated plastics and domestic solid-fuel burning appliances.

Closing date for the receipt of entries is October 9, and full information is available from the bursaries officer, Royal Society of Arts, John Adam Street, Adelphi, London WC2.

## Award from Bavaria

Lorenz Hutschenreuther, a porcelain manufacturer of Selb, Bavaria, is to sponsor an annual *Anglo-German Design Award*, to be presented to a young British designer for a design to be used on a dinner set, tea set and coffee set. The prize will be £250 and a month spent at the sponsor's works in Selb.

The judges for this year's competition are Hans Achtziger, the Marquess of Queensberry, Sir Kenneth Clark, and E. A. Lane. Further details are available from the organiser, *Anglo-German Design Award*, Continental China Ltd, 32 Brooke Street, London EC1. The closing date for entries is October 1.

## Turners' competition

The Worshipful Company of Turners announces its 1962 *Prize Competition*. The competition will consist of three classes: wood; any one material other than wood or any combination of materials which may include wood; and pottery. The first two classes are further divided by age groups, and the second has a section for pieces which are not shaved, turned or glazed after throwing, and one for pieces which are glazed and/or ornamented. The closing date for entries is January 15, 1962, and further details are

continued on page 87



Which  
laminate  
will give  
me more  
creative  
scope?



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THE LIFETIME LAMINATE

FABLONITE is the new *top-quality* laminate that introduces over 70 new and exclusive stylings. There are 13 exceptionally realistic wood grains (their unique long 'repeats' defy detection!) ... 18 pure plain colours ... hosts of colourful patterns. The glorious 'Harmony' stylings (combining two or more effects in one distinctive panel) give individuality to built-ins and make interesting focal points. FABLONITE *costs less to use*—list price is only 3/9 per square foot in the standard range (including wood grains). *Planned nation-wide distribution* ensures that you get the FABLONITE you want, *where and when you want it*. No costly hold-ups ... no last-minute changes of plan!

The Fablon Building Division is ready to assist you with technical information. For details of prices, stylings and specifications, post the coupon today, to FABLON LTD., BERKELEY SQUARE HOUSE, BERKELEY SQUARE, LONDON, W.1.

*Fabulous New* **Fablonite**

To: FABLON LIMITED, Berkeley Sq. House, Berkeley Sq., London, W.1.

Please supply details of FABLONITE prices, stylings and specifications.

Please arrange for a FABLONITE consultant to call by appointment.  
(TICK WHERE APPLICABLE)

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

D.9

available from the Clerk, The Worshipful Company of Turners (Prize Competition), Apothecaries' Hall, Black Friars Lane, London EC4.

## MISCELLANEOUS

### Corporate buying

The 1961 International Design Congress on the theme of *Design Policy for Corporate Buying* (DESIGN 149/85), which is being sponsored by the CoID, will now take place from October 4-5, at the Royal Society of Arts. Further additions to the advance list of speakers include Professor Misha Black, Professor Richard Llewelyn Davies and Raymond Loewy. Details are available from the Congress secretary, James S. Cousins, CoID, 28 Haymarket, SW1.

### Russia digs modern

A recent reception at Heal & Son Ltd, the Tottenham Court Road store, for a group of Russian textile designers proved so successful that they insisted on being shown round the whole shop. They were particularly delighted by the modern designs shown. In the North of England, they said, they had seen only "very old" designs, which had no reference to contemporary life - "we saw enough roses to last us a lifetime".

British colour combinations also often surprised them, and so did the whole conception of a freelance designer, their own system depending exclusively, it appeared, on staff designers.

The furnishing textiles they liked best of those on show at Heal's were Nicola Wood's *Echelon* and Dorothy Smith's *Lunette* - both boldly modern patterns which are in 'Design Index'.

### Domestic design course

The Manchester College for Adult Education is to repeat its *Design in the Home* course of two years ago. The course, which will run from September 26-December 19, will be concerned with the latest developments in furniture, decoration, heating and lighting equipment, furnishing fabrics, and so on, and will include lectures, demonstrations, films and other aids. Further details are available from A. C. Wright, College for Further Education, Lower Mosley Street, Manchester 2.

### Silken words

The *International Silk Congress* held recently in London, had as its theme *The Triumph of Silk*: a

Soviet designers at Heal's (see *Russia digs modern*).



### Street furnishings expand

HRH the Duke of Edinburgh inspected the CoID's Street Furniture Exhibition on the South Bank site when he visited the IUA Congress recently. The exhibition has now

been substantially increased in size. Catalogues of the display may be had from the secretary, CoID Street Furniture Panel, 28 Haymarket, SW1.

theme which was justified by the emphasis at the concluding press conference on the hopes and plans for the increased production of silk (the 'triumph', it appears, is so concrete that supplies of the raw material lag well behind demand).

### Presented for posterity

One of the *Hamilton* sideboards made by Archie Shine Ltd and designed by Robert Heritage is to be presented to the Bowes Museum in Durham this month. The sideboard, which won a *Design Centre Award* in 1958, will be on permanent display in the museum.

## EXHIBITIONS

### Jewellery today

The Worshipful Company of Goldsmiths, in association with the Victoria and Albert Museum, is organising an important international exhibition of modern jewellery. This will be held in the Goldsmiths' Hall from October 26 - December 2, and its theme will be the evolution of modern jewellery design. Jewellery produced since 1820 will be on display, and many contemporary designers are working on new pieces for the exhibition. Jewellery design in this country is at its lowest ebb, and perhaps this exhibition, which will show the work of some of our best craftsmen, will engender a more imaginative approach in the industry.

### CoID in USA

The Board of Trade, the Central Office of Information, and the CoID are co-operating in two large

displays of British goods. The store of Carson Pirie Scott & Co in Chicago will display over \$1 million worth of British goods from September 25 - October 7, and the Stix Baer & Fuller store in St Louis will be wholly given over to a similar exhibition from October 19-28.

The CoID is providing displays in which modern products will be shown against a background of traditional design of the nineteenth century and earlier. The exhibits, which will be shown in display cabinets specially designed by the CoID, have been selected with the co-operation of the stores' buyers, and will be backed by stocks for sale.

## LETTERS

### CONTROL LOOP CONCEPT

A number of educationalists, designers and design critics have commented on the article *Control Loop Concept* published in DESIGN 148/42-48. A selection of extracts from their letters is given here.

### Critical approach needed

Sir: I am glad to see that DESIGN is investigating the basic principles of industrial equipment design. It is all too easy to accept existing methods and principles of operation without question, and in fact there is often considerable pressure on the designer to do so.

*continued on page 89*

# Architect-designed for **Westclox**



## the new **Executive 10**

Designed in collaboration with a firm of top design consultants, the Executive 10 combines reliability with legibility and first-class design. It has been accepted by the Council of Industrial Design for inclusion in the Design Index.

Executive 10 is a flush-fitting electric wall clock, 10" in diameter. In white or black, £6. 12s. Also in this new Westclox range of commercial wall clocks is the larger Monitor 12. With a diameter of 12", this clock is of the most modern transatlantic design and costs £8. 2s. 6d.

Details and list of agents from

**WESTCLOX** STRATHLEVEN DUMBARTON SCOTLAND

As the article pointed out, any new approach may be met with suspicion, even resentment in some cases, and may encounter unforeseen sales resistance.

Consequently, the product designer is usually employed to improve and develop equipment along more or less conventional lines, rather than to introduce completely new principles. His brief is therefore to effect reductions in cost, to eliminate troublesome features, and at the same time to build the product into an attractive whole.

He is expected to provide a design that will show a safe and easy profit on a limited investment in design time, development and retooling cost.

Nevertheless it is still worth while for the designer to make a critical examination of operations during the fact finding stage of design. It will help him to retain the initiative when questioning the experts, and perhaps be 'one up' on colleagues or clients who have taken the traditional methods for granted. His approach may well stimulate them into reconsidering the project and proceeding on more advanced lines. Besides, the designer may find himself at the dead end of a branch of development, faced with the choice of either copying his competitors, or styling just to look different. An analysis on the control loop principle may pave the way to an original development.

L. E. WINGFIELD  
17 Vicarage Road  
Sunbury on Thames  
Middlesex

#### Model thoroughness

Sir: The new series of articles by W. H. Mayall and Brian Shackel on the control loop concept should be most useful, and I look forward to seeing the other instalments.

I have arranged that every member of the current machine-tool class at the Manchester College of Science and Technology obtains a copy. I do not believe in lecturing by merely quoting other people, so I wish the original articles to be studied at leisure by the students. While there is nothing intrinsically

new in the methods outlined, how many designers in fact adopt this thorough procedure for investigating a problem?

R. M. KAY  
AEI (Manchester) Ltd  
Trafford Park  
Manchester 17

#### Mumbo jumbo

Sir: My immediate reaction to *Control Loop Concept* is that the man-machine relationship is a basic consideration in all matters of design where the product has to be used by a human being. It should be fully known and understood by every serious designer and, I believe, it is. The article appears to me to go out of its way to make simple things complicated, and I think it is another one of those efforts to surround commonly understood facts with a mumbo jumbo of pseudo-technical journalism. I do not think it will deceive anybody except the journalists themselves.

JACK HOWE  
Jack Howe and Partners  
450 Edgware Road  
London W2

#### Levels for study

Sir: I certainly think that industrial design practice should move in the direction outlined by the article, and I can imagine that the mind of an orderly man, one who has the opportunity of carrying his training through into practice, would be likely at some stage to review the job and break it down into these levels of importance and study.

KENNETH GRANGE  
7A Hampstead High Street  
London NW3

#### Complexity complex

Sir: My first impression is that there is nothing new to me, or to any other designers with whom I have discussed the article, in the concept. All these things are the usual data one takes into consideration



#### Veneziana

The International Council of Societies of Industrial Designers will meet for its second general assembly from September 14-17 in Venice, and takes as its symbol the forcola (prow of a gondola), illustrated ABOVE. Speakers at the assembly will include Professor Misha Black, ICSID's current president, Peter Muller-Munk, Sir Herbert Read, Count Sigvard Bernadotte, Enrico Peressutti, Alberto Rosselli and Tomás Maldonado.

whenever an object for operation is to be designed. One normally takes into account the position of the work table in relation to the operator, the best height

continued on page 91

#### Amor vincit omnia

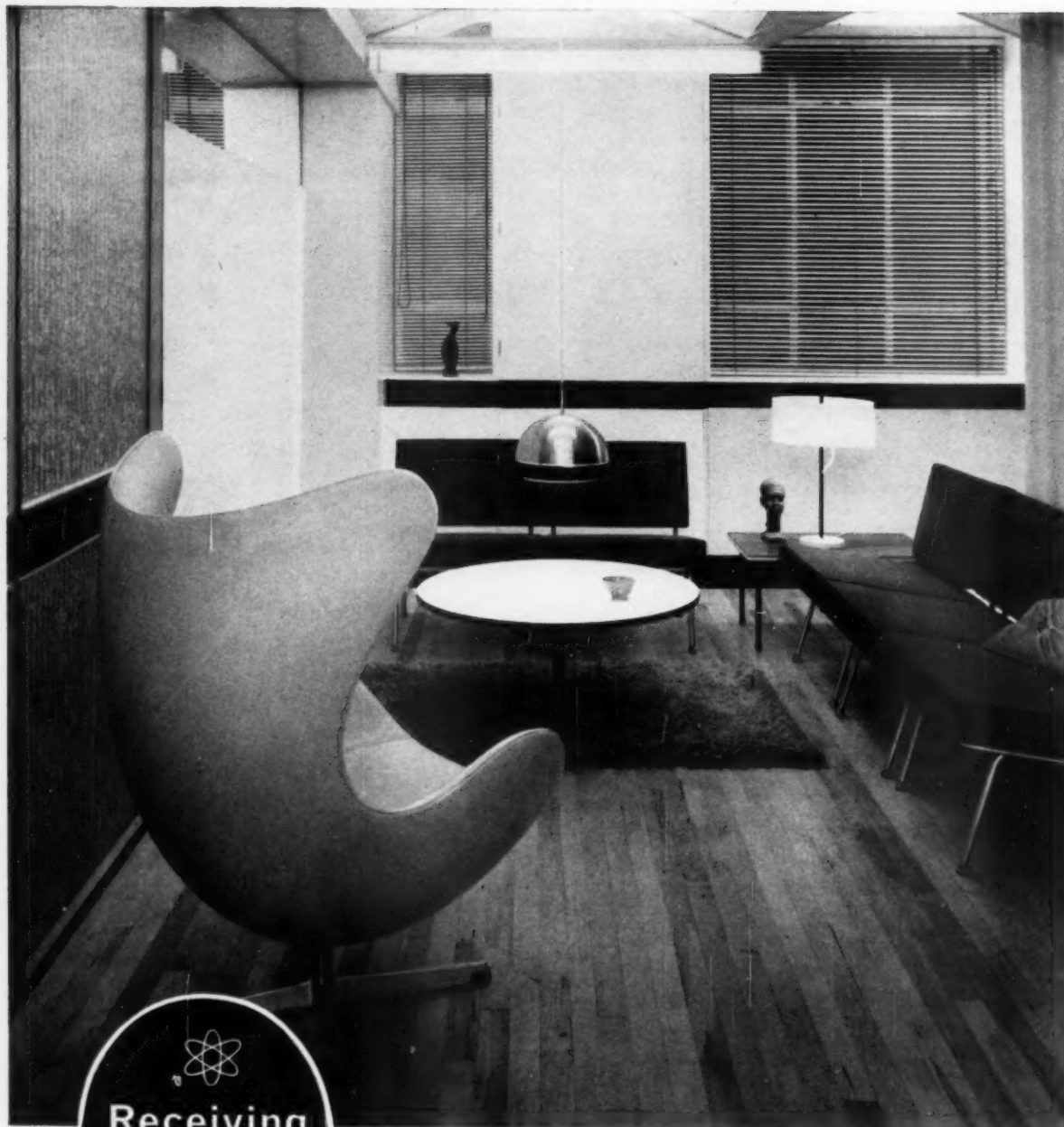
Barrie Bates, a New Zealander now at the Royal College of Art, won first prize in the Layton Student Awards for

these ideas for a series of half-page advertisements on the theme 'Drink more tea'. This new competition is being

organised by C. & E. Layton Ltd as a sister event to the Layton Annual Awards (DESIGN 150/89).







Receiving  
you...  
loud and  
clear

This is our Reception. We'd like to receive you...give you  
a new Reception too, or an Office Suite designed to suit you  
...add prestige...impress clients. Interior decorators?  
Call us what you like. Call us though.

THE CONTRACT DIVISION OF



TIMELESS TREND

DESIGN  
QUALITY  
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Phone: BELgravia 7541

FURNISHING STORES THROUGHOUT SOUTHERN ENGLAND

for working, the best place for controls; most machine tool manufacturers supply, and most designers would ask for, likely conditions of shop operation.

I am quite bewildered by the expansion of what is an entirely ordinary procedure into something apparently complex. Just imagine the everyday process of striking a match charted in this fashion. Design to me is a job – a way of earning a living, employing acquired skills – and I fail to see any useful purpose in attempts to turn it into a mystique.

DOUGLAS SCOTT  
DS Associates Ltd  
100 Gloucester Place  
London W1

#### Clearer definition

Sir: It is becoming of increasing importance to our profession to be lucid and comprehensible when explaining a design solution to senior engineering designers; it is not sufficient to refer to intuitive design, aesthetics, extra sensory perception and so on, for these are looked upon as terms too vague to be convincing. Such articles may therefore help industrial designers to become more articulate.

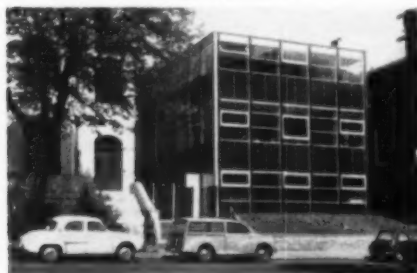
JOHN BARNES  
Allen-Bowden Ltd  
Anfield House  
Russell Terrace  
Leamington Spa

#### Man-machine analysis

Sir: How far the industrial designer should engage in the analytical shaping of the specification of machines seems to me to require careful consideration. It is true that he is often able to suggest radical changes resulting in increased efficiency and comfort, because there is a strong connection between aesthetics, which is largely a matter of sense reactions and therefore principally physiological, and ergonomics. The real value of the industrial designer, however, lies in his skill in visual organisation, and I see some danger in his extending his activities too far into other fields which impinge upon his, in that he might become a jack of all trades and a master of none. If he is to become an ergonomist, industrial

#### Drama takes wing

The J. Arthur Rank Organisation sponsored this extension to the Central School of Speech and Drama, the John Davis wing. The extension has been built by A. H. Anderson Ltd, using its A75 method of construction. A75 is a basic structural system using a 6 ft 3 inch horizontal grid; although prefabricated components are used the system allows a considerable amount of flexibility.



#### Pavilion in Hungary

The CoID's display at the recent Budapest International Fair, mounted as part of the official Government stand, was

housed in this special pavilion, designed by the exhibitions division of the Central Office of information.

psychologist or work study engineer, why not a vibration, acoustic or heating and ventilation specialist?

F. C. ASHFORD  
14 Grosvenor Place  
London SW1

#### RADIO TIMES

Several readers sent in comments on the design analysis article on Radio Times (DESIGN 150/68-77):

#### Essential detail

Sir: Your design analysis of *Radio Times* was a most welcome innovation. Typography tends to be judged almost invariably in terms of more or less subjective criteria: it is either 'attractive' or 'pretty' or 'charming' or 'vigorous' or 'lucid' or 'ugly' or 'logical' or 'consistent'. At best it may be described as 'functional' without clearly establishing what the function is. Your thorough survey makes a sincere attempt (the first?) at being objective, and I cannot think of anybody who could quarrel with it. I attach particular importance to your comments on the need for such a task to be undertaken on a basis which ensures that the consultant – who in any case should have been a designer with exceptionally wide experience as a typographer, rather than a graphic artist, however distinguished – has scope to go into every smallest detail before any changes are put into effect, and that he continues to supervise, or advise on, the typographic handling for a considerable time. Otherwise the result can only be a new coat of paint through which the cracks still show.

Your one important omission is that you treated the programme pages as if they consisted merely of TV and Sound, forgetting that Sound is divided into Home, Light, Network Three, and Third. The Third

Programme, in particular, has the distressing habit of changing place at least once a week. Another inconsistency you did not spot is that the page break between 'morning and afternoon' and 'evening' may take place at 5 pm on Thursday but at 4 pm on Friday. It may well be difficult to achieve uniformity in such matters, but users of *Radio Times* would surely be grateful for firm editorial control aimed at it.

Lastly, a comparison with comparable periodicals from other countries might have been enlightening. Do we do less well or better than they, and if less well, what could we learn from them?

HANS SCHMOLLER  
The Old Mill House  
Mill Road  
West Drayton  
Middlesex

#### Throwing stones

Sir: Your design analysis of *Radio Times* is courageous, even if it is a bit lenient. When one reads of the research, the conferences and the high level briefing, there comes to mind that old Latin tag *parturiunt montes*, etc, which being translated means, "The mountains are in labour and there is born the ridiculous mouse". Could no one at the BBC see that they had just simply made a mess of it, and that it is now twice as hard to find a programme as it was before? The black and white box *cliché* is typical styling without a thought for purpose. Incidentally, why confuse the reader still more by printing the date of issue on every page close to the date of the programme?

I called the criticism courageous because, of course, as a magazine you live in a glass house. Take for instance, your correspondence columns, where a

continued on page 93

A SELECTION  
FROM THE

# WINNING DESIGNS

*Submitted by G. Copcutt Esq*

## WILSON RADIATOR LAYOUT COMPETITION - 1961

We offer our congratulations to the three  
successful competitors, who are:

First prize - £150

**G. Copcutt Esq., B.A., A.R.I.B.A.**  
The Hill, Cumbernauld, Glasgow

Second prize - £75

**J. V. Malton Esq., A.R.I.B.A.**  
28 Woodview, Grays, Essex

Third prize - £25

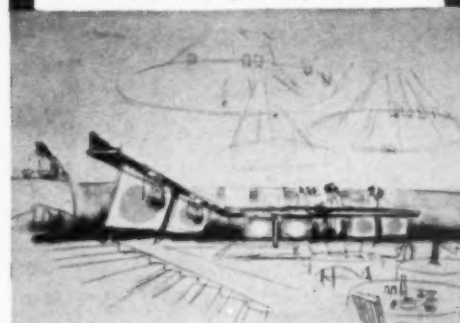
**W. F. Martin Esq.**  
130 Park Road, East Barnet, Hertfordshire

Highly Commended

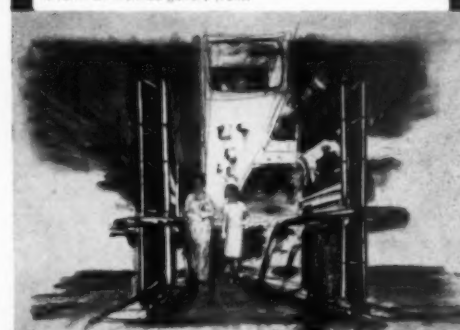
**J. J. Cadwallander Esq.**  
212 Penns Lane, Sutton Coldfield, Warwickshire



Office Building - Wilson panel radiators 8' 6" high x 1' wide mounted vertically in storey high windows (one pair only shown)



Restaurant - Standard Wilson single panel radiators are used to form an inclined gallery front.



Auditorium Foyer - 8' x 3' Wilson radiators bolted vertically in pairs to aluminium stands and used to demarcate routes.

The judging committee considered the general standard very high. Entrants clearly found the slimness, comparative lightness and general decorating potential of the flat-sided Wilson Straightline radiators a considerable help in producing central-heating room layouts that were both pleasing to the eye and practically efficient.

We wish to take this opportunity of thanking all competitors for the obvious care and trouble taken in submitting their designs.

Write to us for further details  
of this Scandinavian designed radiator, available as Straightline (flat surface), or Waveline (dimple surface).



**HENRY WILSON & CO. LTD. (RADIATORS DIVISION)**

P.O. BOX 6, KIRKBY, LIVERPOOL (Makers of Heating Equipment since 1840)

writer's address gets five or six lines, though it is of neither interest nor importance. You publish four lines of comment from Howard Keith on a furniture article, but his style and address occupy six. I beg you suppress anything but my name.

NOEL CARRINGTON  
\* \* \* \* \*

#### Impure emotion

Sir: It was extremely interesting to read your design analysis of the re-styled *Radio Times*. Venturesome too, seeing that you have in the past confined this series to a world of design with which you are more familiar. No doubt you were tempted to embark on this through your interest in the functional aspects of product design involving, as it must, a reliance on research data.

Most of your readers respect your integrity in the desire to raise the rather low level of graphic appreciation in printed matter. Your own magazine is a fine example of good sense, balanced by a respect for the aesthetic. However, there are certain dangers in applying the cold, functional logic in this particular case. I agree that the first job of the publishers of *Radio Times* is to consider the problem of design as a means to communicate to the reader that which the reader needs to know. Let me put it this way – a newspaper or a newspaper's main task is to communicate the news, but it has also to appeal and this may even at times conflict with the pure function. The emotional content creeps in, and might even involve a degree of vulgarity, but what is really important in this particular case is that the reader is both listener and viewer, which makes *Radio Times* a different kind of magazine or newspaper.

The publication must entice the reader to participate in the interest of the BBC and, therefore, must involve the editor in competing with other programmes. A good deal of the irrational or non-functional comes into this and upsets the purer school of objective design. The BBC is selling entertainment and is not a normal news agency.

#### Refurbishing the post

Sir Hugh Casson and Professor Misha Black supervised this modernisation for the GPO of the Knightsbridge branch office: it is the fourth of a series of six offices which form the pilot scheme of the GPO's extensive modernisation plans:

I think your conclusion was fair and objective, but I would question the order of points. Type selection should, for example, have come much later. More could have been said about the advertising space problem and more about appeal.

As for Abram Games' design, I do agree with you that he had a problem which has not been completely resolved – perhaps not even to his own satisfaction, particularly in that he has no continuous control over what happens to future issues.

You should continue this series of analyses, taking it into the advertising field, wherein lies the largest investment impact-wise; and we must hope it will help to raise the general level of agency and client visual appreciation.

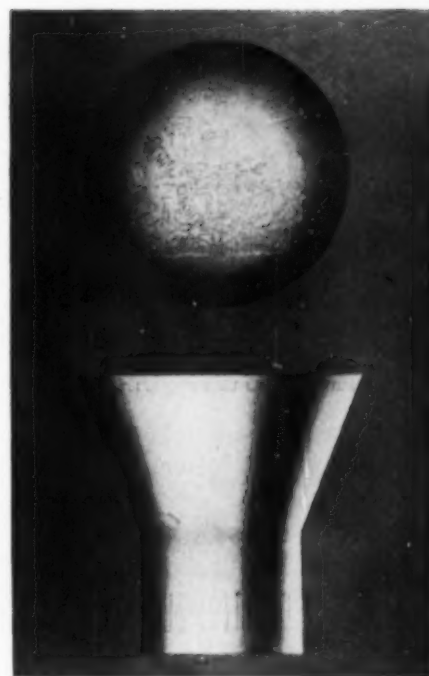
LIONEL ALLSTON  
31 Great St Helen's  
London EC3

#### Criticism unleashed

Sir: The first reaction to the design analysis of *Radio Times* was admiration of the fine objectivity of the authors. It is hard to imagine how people with feelings for good graphic design could have refrained from far stronger adverse comment.

After reflection, though, it seems the writers held themselves on too short a lead. With your usual editorial policy of stating clearly when a thing is poorly designed, the summing up of the article was too mild by far. It simply stated that the redesigning of the *Radio Times* had given no more than a face lift.

Face lift? That, sir, implies improvement. But the half-hearted ranging left of the programme details is no more than a sop to the designer's preferences when there is no overall design policy to ensure clarity. The old *Radio Times* was grey and a bit drab in a 'twenties sort of way, but at least you could tell editorial from advertisement. Not so now. Greyness is the last thing the new version can be accused of: indiscriminate splotches of black and white abound. Not being sure where an article starts you dive in bravely, expecting after a few minutes to learn when



#### Pot for hunting

Howard Webster, a student at the Leeds College of Art, won the first prize in the Royal Hunt Cup section of the Worshipful Company of Goldsmiths' competition for the Ascot race cups with this design, to be made by Asprey & Co Ltd.

to listen or view. But instead you are told to buy a giant size packet from your grocer for 1s 9d.

Readers, alas, have a way of dealing with such confusing publications. They stop reading them.

But it is easy to snipe. The tragedy is that *Radio Times* has been changed, seemingly in the name of good design, when the result is retrograde. A dullness which had the merit of consistency has been exchanged for an unhappy range of visual indiscipline. Would it be out of the question, even now, to commission a redesign to come into effect in say a year or 18 months?

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## BOOKS

#### The business of management

Roger Falk, Pelican, 3s 6d

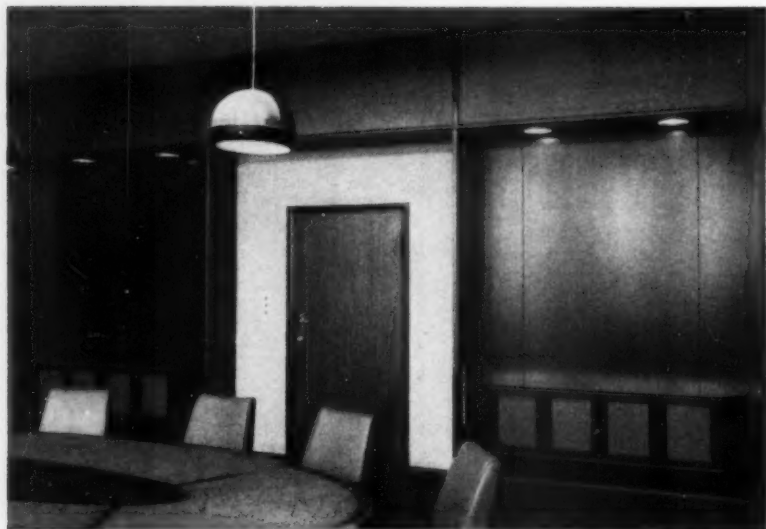
Ever since the Industrial Revolution began, industry has had problems. In the beginning they were not big ones, for labour was plentiful and cheap, almost everything produced was sold before it was made, and the factories were small and paternally managed. Nevertheless, running an industry was much more complex than running a farm, and the

continued on page 95





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Reyrolle of Hebburn are famous and forward looking. They commissioned Ian Henderson to design and carry through, in conjunction with the architects, Cackett, Burns Dick & Mackellar, the complete decor and furnishings of their splendid new executive building, including the Directors' luncheon room — (traditional

English)—directors' offices, conference room, boardroom, secretariat, etc. — (restrained modern.) The work was carried out with Ian Henderson's well-known insistence on quality. In addition to the execution of complete schemes, Ian Henderson specialise in fine carpets, fitments and beautiful textiles.

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human and economic relationships between the manager and the managed began to occupy the minds of men.

Charles Babbage in 1832 was the first to attempt to find out if there was any general principle in industrial management. Later in the century, the 'scientific management' movement got under way in the United States. Here in Britain men like Robert Owen, Seebohm Rowntree and Lyn Urwick, each in his day, have made notable contributions to the study and practice of management in the ever changing social conditions. But we still know only too little.

Working within the limitations of his new Pelican, Roger Falk makes no pretensions to having produced a new book or manual, but as a consultant he has a statement to make. For example, he sees management as a new conception in social science, and he is led to devote this theme as much to men as to principles or ideas.

Readers of *DESIGN* who have at heart the cause of persuading industry to accept higher standards of product design or industrial amenity could read Mr Falk with interest. It may well be that the status of the industrial designer does not stand very high in the board room, or in the private offices of the top executive, and the immediate hope lies in convincing the marketing man that good design might be one gimmick among others to launch new projects or to revive failing ones. It might be interesting to examine in how many of the hierarchies of the largest companies there is any responsibility toward, or indeed appreciation of the importance of good design, in respect of either the company's prospects or its obligations to the community.

It is probably true that, as Roger Falk points out, it is in the surviving family firms which place quality and reputation above all else that the CoID will find its readiest allies.

A. EVERETT JONES

#### Interiors book of restaurants

William Wilson Atkin & Joan Adler, *Whitney Library of Design*; Alec Tivanti Ltd, £5.5s

This is a most interesting and informative book. It covers all types of restaurants - festive restaurants, luncheonettes and cafeterias (the terms and subdivisions are the authors').

The subject is treated in three sections, the first two of which are mainly text and the third illustrations. The first section is aimed at the new restaurateur (or the established one who is running into difficulties), and here some advice is clearly needed, for we are told that of the 20,000 new restaurants which open in the United States each year something like one third close down in one year, half in two years and after five years only 4,000 survive.

The second section deals in great detail with the design decisions and the programmes involved in the creation of a restaurant. Thus the problems of management and design are integrated in the text of a book which cannot fail to be of great value to both restaurateurs and designers.

The third and largest section is a portfolio of illustrations, mostly from the United States, but including examples from Europe. This should be the most interesting part but it is, in fact, disappointing.



#### Solicitors at the Centre

R. D. Russell designed this recent exhibition at *The Design Centre* representing a solicitor's office with its waiting and secretarial rooms. It shows how a modern setting can be used for a profession in whose public image tradition plays a

large part. Comments made by visitors ranged from "Please, somebody take notice and provide something like this!" to "The architect has no idea of how a solicitor's office is run: he has designed a Wall Street super tycoon's office."

Restaurant interiors are essentially backgrounds for people, and do not always photograph well when empty. The pastiche traditional and the decorator's over mannered modern interiors, many of which are shown, come off worst in this respect. Such rooms, softly lighted and full of people, can be most agreeable; floodlit and empty for photographing they can be arid beyond endurance.

There must be a first customer, and for him the restaurant will be empty apart from the staff. Some interest must be provided to counteract his chilling and lonely despair. The designers of Victorian bars were perhaps aware of this need, and certainly they dealt with it by providing a crowd of reflections in the looking glasses which they used so lavishly.

In the few really good modern restaurants illustrated an antidote to emptiness is to be found in the purity of detail, infinitely more satisfying than a pretentious background. One case in point is the Motel on the Mountain, which has the enchanting and serene simplicity of a Japanese designed interior. Another is the elegant and sophisticated Four Seasons in the New York Seagram building, in which the most successful use of enormous plants combines with immaculate detail to create an atmosphere of the greatest charm. Another way of taking the customer's mind off the empty room is by the exploitation of the prospect. Many American restaurants seem to be sited to make the utmost use of a magnificent view, and it is sad that so few in London take advantage of the possibilities of a splendid river.

The conclusion is that, for this reviewer, the beautifully detailed and serene modern restaurant wins every time. There are very few of them, but if this book helps, as it certainly should, to swell the number, it will have done a first rate job.

R. D. RUSSELL

#### This month's cover

The photograph of *Canberra* on this month's cover is by Skyfotos.

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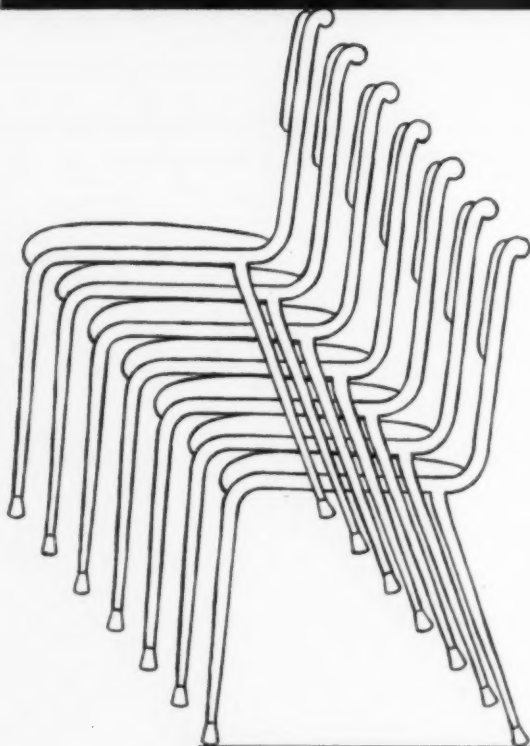
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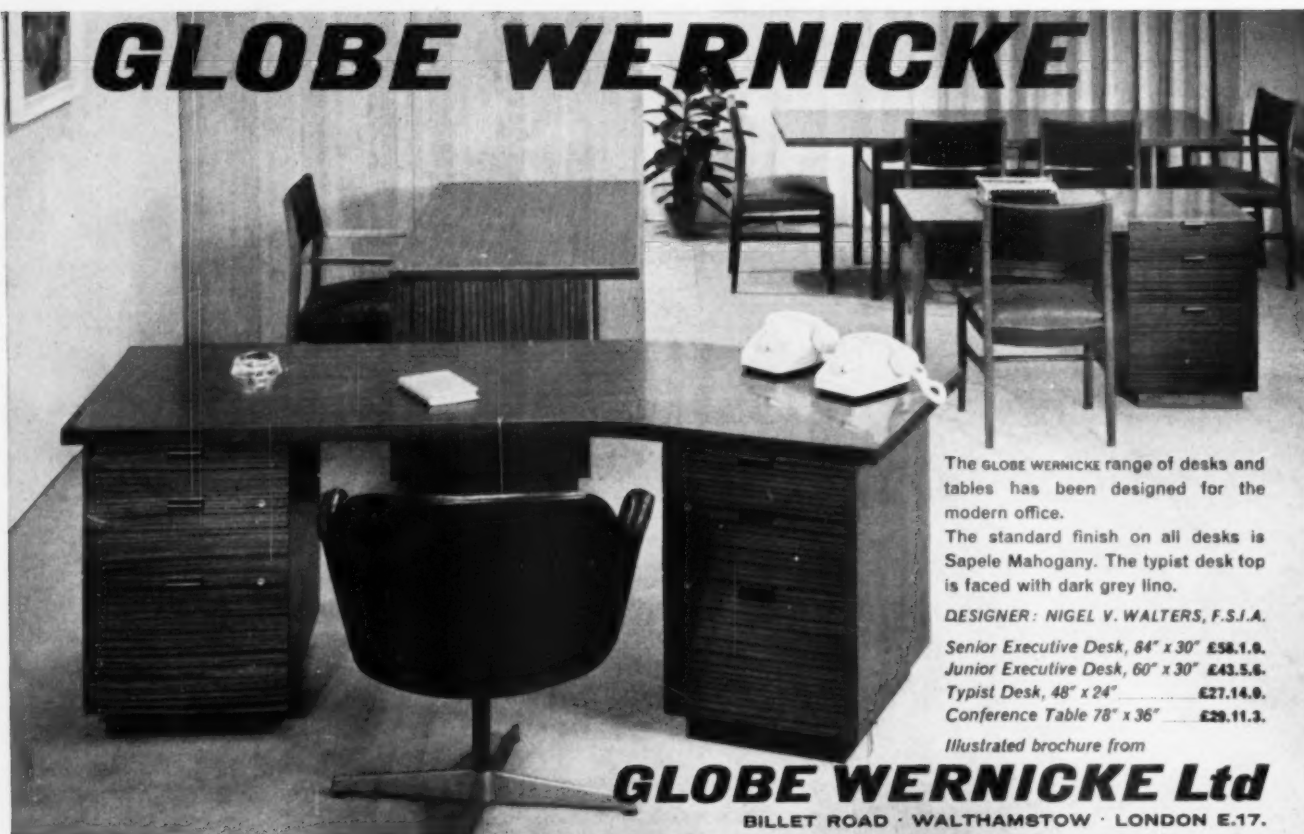
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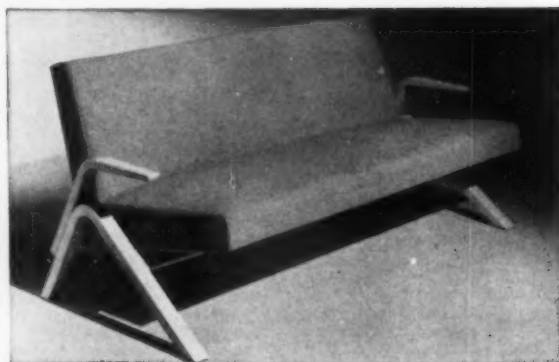
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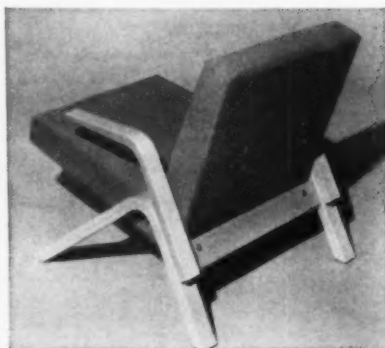
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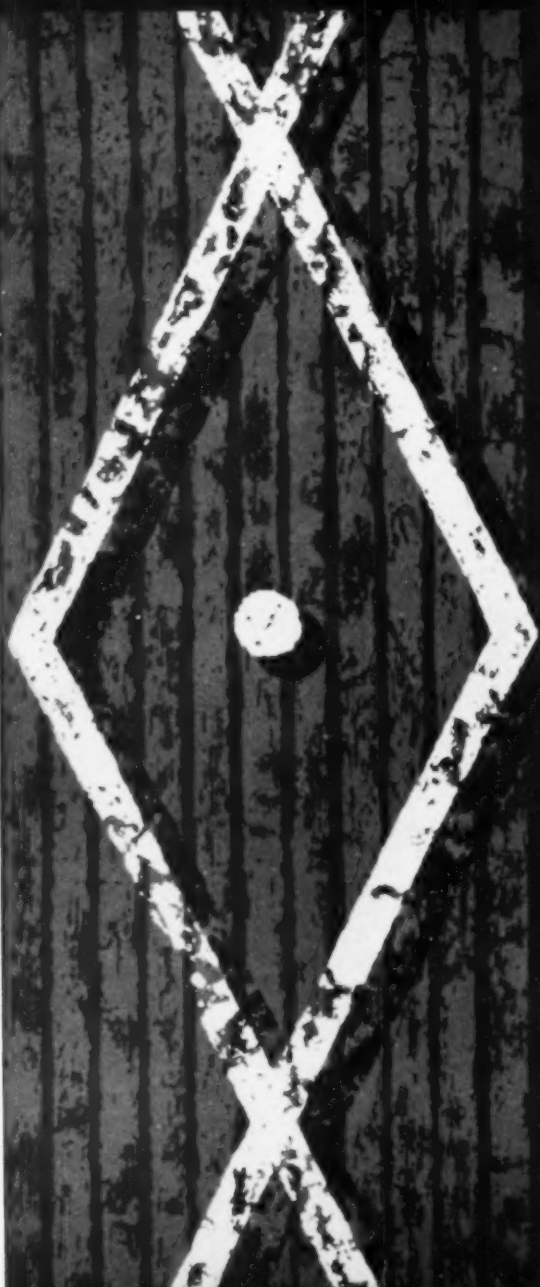
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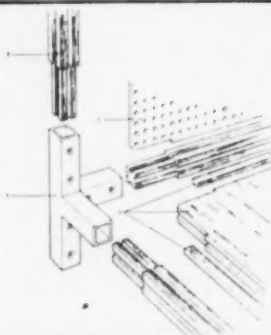
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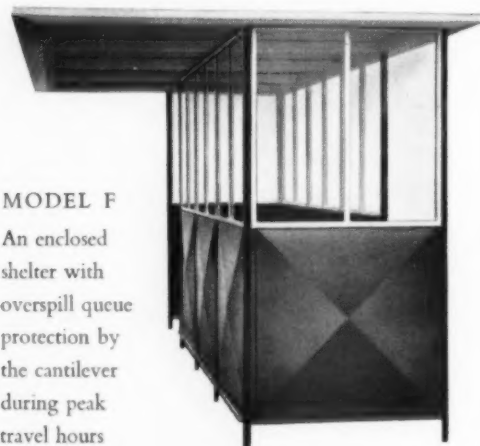
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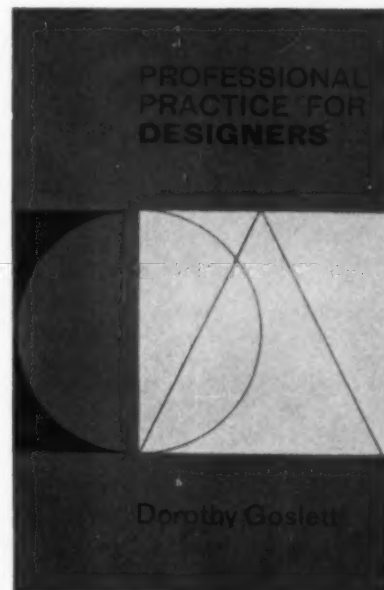
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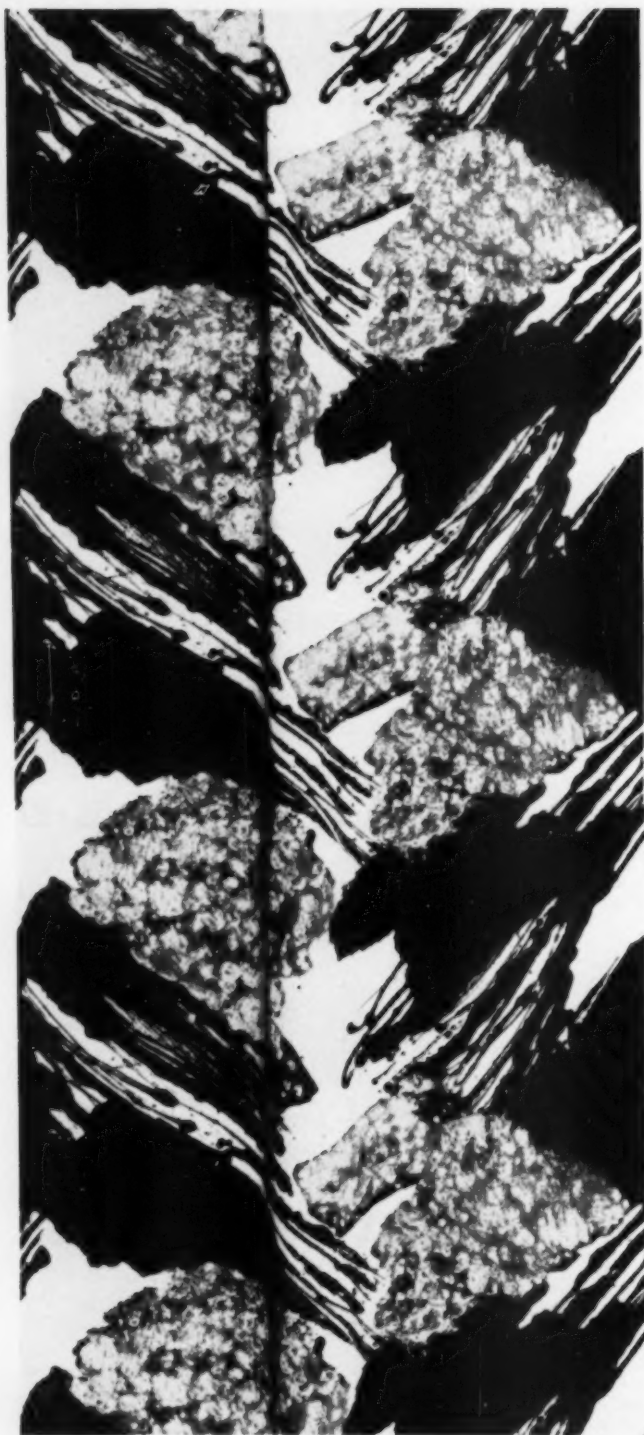
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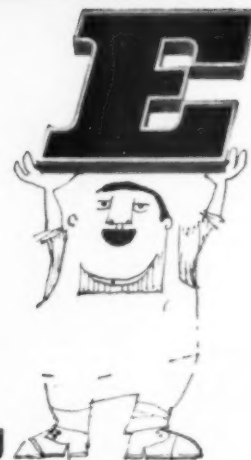
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The salary scales are: Senior Lecturer £1,750 rising to £2,000; Lecturer £1,250 rising to £1,700; commencing salary within these scales will be determined according to qualifications and experience. An allowance is made towards travelling expenses. Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, Marlborough House, Pall Mall, London SW1. Applications close in New Zealand and London on 15 September 1961.

London County Council

TECHNICAL COLLEGE FOR THE FURNISHING TRADES  
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Required as soon as possible, a Teacher of Three Dimensional Design for one or two sessions per week. Remuneration: £4 16s 6d per session. Particulars and form of application from the Principal, quoting (FE.3a/d/2230.9).

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City of Bradford Education Committee

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Scale for Assistants (Grade B) £700 - £1,150. Further particulars may be obtained from the undersigned. Applications should reach the Principal, Regional College of Art, Bradford 7, not later than two weeks from the appearance of this advertisement. A. Spalding, Director of Education, Town Hall, Bradford 1.

THE CENTRAL OFFICE OF INFORMATION invites applications for the post of Director of Exhibitions Division on the salary scale of £2,715 - £3,415 per annum to succeed Mr Cecil Cooke, CMG, CBE, who retires from the Department on 30 November 1961. The work of the Division involves responsibility for the production of thematic exhibitions such as the Commonwealth Exhibition now touring the United Kingdom and the Government Pavilion at the International Exhibition, Brussels, 1958; and for Government participation in Trade Fairs such as New York, 1960, and Moscow, 1961 and in the World Fair, Seattle, 1962. In addition there is a wide range of smaller displays and exhibits in commercial and other exhibitions in the UK and at overseas trade fairs. The Director must have experience and qualifications enabling him to interpret policy in exhibition terms, to direct the work of some 100 staff including designers and other specialist staff and to take personal creative and administrative charge of the more important exhibitions. Write, Establishment Officer, Central Office of Information, Room 712, Hercules Road, Westminster Bridge Road, London SE1 for application forms.

THE BBC Television Service wishes to extend its panel of free-lance graphic designers, illustrators and photographers. Persons of high professional standing in these fields are invited to apply for interview to Graphics and Effects Organiser, BBC Television Centre, W12 giving brief particulars of careers and experience.

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at a salary in accordance with APT Grade II (£815 to £960 per annum). Preference will be given to applicants possessing the National Diploma in Design or equivalent qualifications. Applications, giving details of age, education, qualifications and experience etc, together with the names and addresses of three referees, should be received not later than the 15 September 1961, by the undersigned from whom further information as to duties etc can be obtained. T. H. Parkinson, Secretary, Council House, Birmingham 1.

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## CLASSIFIED

advertisements continued from page 111

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**INTERIOR DESIGNER** will advise on all aspects of decoration and furnishing for restaurants, shops, offices, exhibitions and domestic interiors etc. Contact Roy Denny, 31a Chapel Market, London N1. TERMINUS 6003.

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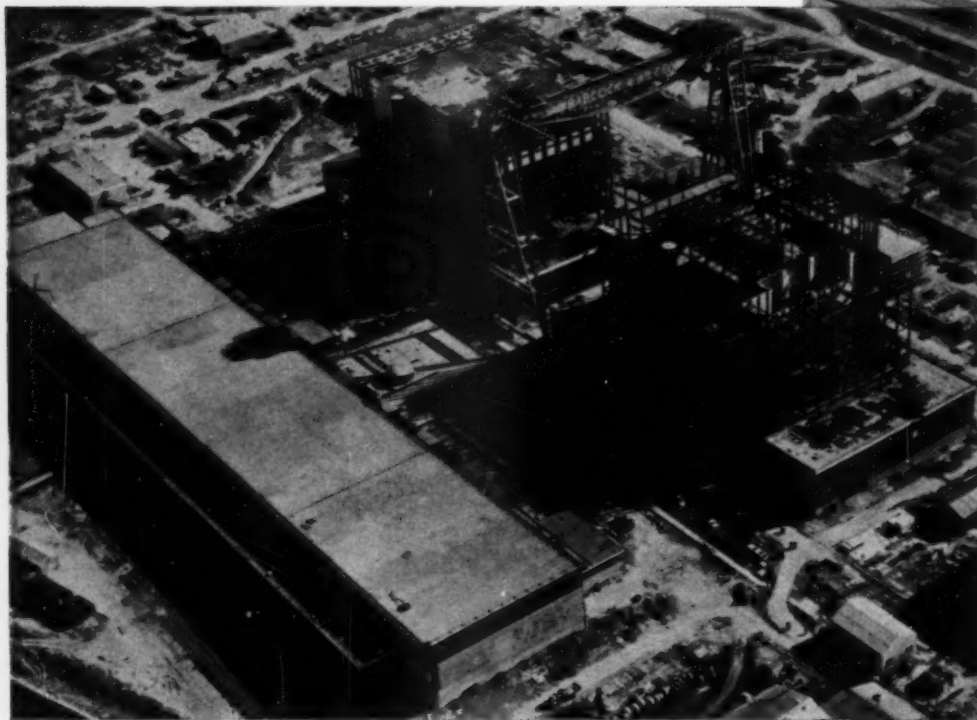
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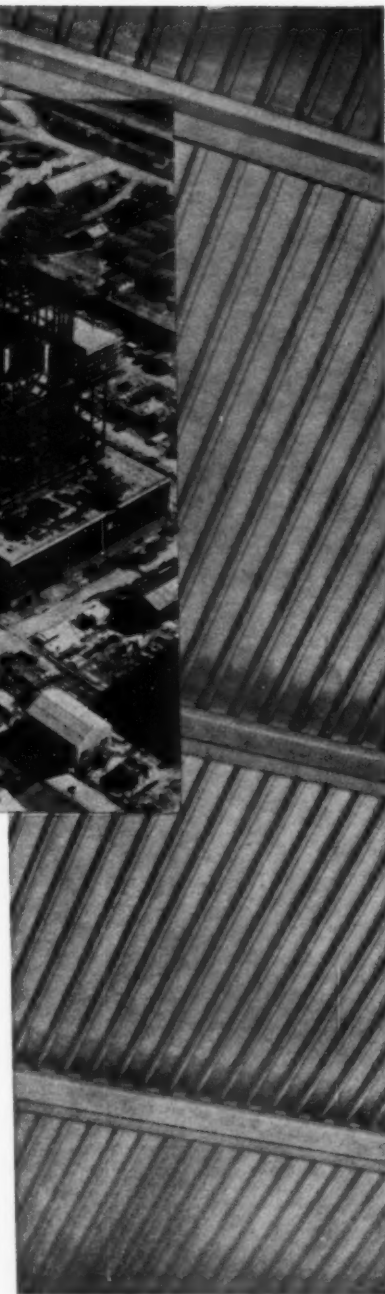


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